VERBAL COMPLEMENTIZERS IN ARABIC

by

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ABSTRACT

A class of Modern Standard Arabic complementizers known as '*ʔinna* and its sisters' demonstrate unique case and word order restrictions. While CPs in Arabic allow both Subject-Verb (SV) and Verb-Subject (VS) word order and their subjects show nominative morphology, CPs introduced by *ʔinna* ban a verb from directly following the complementizer. Preverbal subjects in *ʔinna* clauses show accusative case marking, while postverbal subjects show nominative morphology. Previous research explains these restrictions as default case or Multiple Case Assignment, both problematic for Case Theory as they violate the Activation Principle. This dissertation explains word order and case effects of *ʔinna* within the framework of Phase Theory and Feature Inheritance (FI). Morphological, historical, and usage evidence point out that *ʔinna*-type complementizers have verbal properties similar to illocutionary verbs. Taking Case to be a reflection of phi features that T heads receive from higher heads (e.g. Complementizers) via Feature Inheritance, the nominative-accusative alternation on preverbal subjects can be attributed to the selection of C heads: phi features on null complementizers and conditionals reflect as NOM, while phi features on Verbal Complementizers (VCs) reflect as ACC. VCs show similar Case behavior to the English Prepositional Complementizer *for*. They differ in distribution; while *for* only introduces a subordinate clause, and takes infinitival TP complements, VCs introduce a matrix clause

and require finite TP complements, lending stronger support to Feature Inheritance theory than English *for*.

Nominative postverbal subjects in *ʔinna* clauses are explained as an effect of antiagreement at Spell-Out. Postverbal subjects and the Case probe on T are PF local, allowing for impoverished case agreement. Preverbal subjects and the Case licenser belong to different Phonological Phrases. To satisfy the Recoverability Condition, full case agreement is required between T and the subject, resulting in accusative morphology on the subject. Finally, the requirement that *ʔinna*-clauses have an intervener between *ʔinna* and the verb is explained by associating the full phi features of *ʔinna* with the EPP. As the phi set is inherited from *ʔinna* to T, the EPP property is satisfied by the preverbal subject or by adverbial intervening between *ʔinna* and the verb.

To Laila and Kareem.

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LIST OF ABBREVIATIONS

1s	first person singular
1p	first person plural
2fs	second person feminine singular
2ms	second person masculine singular
3ms	third person masculine singular
3mp	third person masculine plural
3fs	third person feminine singular
3fp	third person feminine plural
ABS	absolutive
ACC	accusative
CA	Classical Arabic
CI	Conceptual-Interpretive interface
DAT	dative
DCA	Default Case Analysis
EA	Egyptian Arabic
f	feminine
FI	Feature Inheritance
fut	future

GEN	genitive
IND	indicative
LSF	Long Split Focalization
MCA	Multiple Case Assignment
MCC	Multiple Case Checking
MSA	Modern Standard Arabic
NOM	nominative
PC	Prepositional Complementizer
SM	Sensorimotor Interface
SO	Syntactic Object
SUBJ	subjunctives
SVAA	Subject-Verb Agreement Asymmetry
VC	Verbal Complementizer

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1. INTRODUCTION

This dissertation is primarily concerned with the behavior of a class of complementizers in Modern Standard Arabic (MSA) known as '*ʔinna* and its sisters' in traditional grammar. Specifically, it investigates case alternation and word order restrictions associated with these complementizers. Although MSA allows both subject-verb-object (SV(O)) and verb-subject-object (VS(O)) word orders after null complementizers (as in 1 and 2), clauses introduced by *ʔinna* do not allow the latter, as can be seen in the ungrammaticality of 4. Subjects of *ʔinna*-clauses show accusative, rather than nominative, morphology (3).

(1) Zayd-un qaabala saalim-an
Zayd-ACC met Saalim-ACC
'Zayd met Saalim.'

(2) qaabala zayd-un saalim-an
met Zayd-NOM Saalim-ACC
'Zayd met Saalim.'

(3) ʔinna zayd-an qaabala saalim-an
indeed Zayd-ACC met Saalim-ACC
'Zayd met Saalim.'

(4) *ʔinna qaabala zayd-un saalim-an
indeed met Zayd-NOM Saalim-ACC
'Zayd met Saalim.'

The case behavior of subjects of *ʔinna*-clauses is unexpected. If we assume that T is the locus of Case licensing, by the time the complementizer is merged into the

structure, the subject DP will have already received nominative, and is unavailable for further valuation. If we assume that C is the source of Case licensing through Feature Inheritance (FI) or through agreement with T, accusative subjects and the ungrammaticality of postverbal subjects are unexpected because TP complements of null C and *ʔinna* are otherwise identical.

This dissertation resolves this Case mismatch through proposing that *ʔinna* and its sisters in Arabic are a class of Verbal Complementizers (VCs), complementizers that share morphological and lexical features with verbs, while still belonging to category C. Taking Case valuation in subject position to originate at C (Chomsky 2007a; Chomsky 2008), the nominative-accusative variation can be explained by [±verbal] feature on C heads. [+verbal] features in VCs transfer phi features and accusative Case to T heads, which value Case features on the subject as accusative. [-verbal] features on other Arabic complementizers (null C and conditionals) contribute phi features that are interpreted as nominative.

This dissertation contributes by examining a phenomenon that has been taken for granted in Arabic generative syntax as a result of Case assignment under a 'default mechanism,' and provides further evidence to a discussion in syntax as a whole about the nature of Case, how Case is related to phi features and agreement, and syntax-morphology interface. The proposal of this thesis further supports the (Minimalist) goal that linguistic features must be interpretable at LF.

This introduction is structured as follows. In section 1.1, I lay out the general theoretical framework. In section 1.2, I provide summaries of each chapter in the

dissertation.

1.1. Theoretical Framework

In this section, I lay out the theoretical assumptions that make the backdrop of the arguments in this dissertation. This dissertation assumes the general framework of the Minimalist Program (Chomsky 2008; Chomsky 2007a).[1] Derivation begins with a selection of a Lexical Array (LA) from the Lexicon (Lex) into the Workspace, where syntactic computations take place. Structure is built via operation *Merge:* two Syntactic Objects (SOs) α and β are taken from LA, and are merged to create a new Syntactic Object {γ,{α, β}}. Lexical Items (LIs) are SOs, and the output of operation *Merge* is also an SO.

Merge is feature-driven. A Syntactic Object that carries an unvalued feature, called a probe, will search the workspace for an SO that carries a matching valued feature, a goal. When a goal is found, the unvalued feature on the probe is valued via operation *Agree*, the goal is rendered inactive (unavailable for further agreement with other probes). If the probe contains an Edge Feature (EF), *Merge* takes place. If the goal is contained in the probe, *Merge* copies the goal and merges with the copy, resulting in Internal Merge (IM; *Move*). Chomsky (2007) argues that only phase heads are probes. For the purposes of this dissertation, this approach includes phi features and Case on C. To derive subjects in the specifier of T (spec,T), FI takes place whereby phi features are transmitted from C to T, T becomes a probe by virtue of inheritance, locates a goal in

[1] My analysis assumes Chomsky (2008) and previous research it is based on, unless otherwise stated.

spec,vP where relevant, and moves it to spec,T under the right circumstances.

FI (Chomsky 2008) captures the correlation between phi features on T heads and their ability to be selected by a complementizer. In English matrix clauses, for example, infinitival T heads cannot be selected by the null complementizer (but rather by an ECM verb or the complementizer *for* in subordinate clauses), and they do not have any phi features (do not show subject agreement). Prior to Phase Theory, this generalization has been captured in terms of selection: null C selects phi-complete (finite) T, and V (and *for*) selects phi-defective (infinite) T.[2] Richards (2007) notes that FI has two advantages over selection. First, it explains the correlation between Phi and C. It is C that carries phi features and Tense features, if it is not merged into the structure, T does not inherit such features. Second, FI allows for a more uniform characterization of phase heads, as v carries phi features as well. Richards argues that FI is conceptually necessary to accurately account for the timing of feature valuation and transfer, and the Phase Impenetrability Condition (PIC). Epstein and Seely (2002) show that feature valuation and transfer to the interface must take place simultaneously, otherwise the interpretable/uninterpretable distinction will be lost. But if transfer takes place simultaneously with feature valuation, PIC will no longer be tenable, as chain heads will also be shipped to the interfaces and will no longer be available as 'escape hatches' for further computation. Richards argues that this problem disappears if phi features are not T features. This way, T can merge to the structure, and inheritance, valuation, and transfer can all take place at the phase level when C is merged to the structure.

[2] In Chapter 5, I show that Arabic has a third type of infinitivals which has only a partial phi set.

Chomsky notes that it is sometimes felt intuitively that FI is countercyclic, but such perceived countercyclicity is no more so than it is for Case valuation in-situ. However, Feature valuation is certainly different from structure building via *Merge*.[3] He also notes (Chomsky 2008:144) that although the device of inheritance is in narrow violation of NTC, it still satisfies SMT because of the role FI plays at the C-I interface. Of course, there is the possibility that there is another device that has the same effect as FI without NTC violation, hence better satisfying SMT. For the purposes of this dissertation, I assume FI as the best available device that satisfies SMT so far.

At a certain point of the derivation, operation Spell-Out takes place. Spell-Out sends the domain of the phase (the complement) to the interfaces (PF to the sensorimotor (SM) interface, and LF to the Conceptual-Interpretive (CI) interface). vP and CPs (and possibly DPs and PPs) are phases. Completed Phases are available for further computations subject to PIC. The domain of the phase is inaccessible: it is invisible to higher probes outside the phase. A probe can only search the edge of a phase; its head and specifier.

1.2. Chapter Overview

Chapter 2 lays out the research problem. *ʔinna* 'that/indeed' is a member of a set of Arabic complementizers that may not be followed by a verb-first TP. The

[3] If for nothing else, FI and Case-in-situ differ in how they can be proven to violate the No-Tampering Condition/Extension Condition. If structure can be only extended at the root, it is easy to see how inserting a specifier of a none-phase head after the merge of a higher phase head entails breaking an already existing c-command relation (in whatever set-theoretic representation we assume), and re-create that relation after inserting the specifier. Case valuation in-situ does not have the same shortcoming. The valuation of unvalued Case on a target DP via *Agree* does not entail breaking any previously established relations.

preverbal subject of the clause is in the accusative, in contrast to its nominative morphology in all other contexts. Assuming that morphological case mirrors syntactic Case, the accusative case on the subject poses a licensing problem: by the time the complementizer is merged, the subject has already moved to spec,T, valued its Case feature, and is inactive and invisible for the Case probe on C.

Chapter 2 lays out the larger context of word order, Case/case, and agreement facts in Arabic. The aim is to give the reader an overview of the contexts and restrictions where *ʔinna*-clauses occur, and contrast the properties of *ʔinna*-clauses with those headed by other complementizers. Arabic allows a variety of word orders: subject-first, verb-first, pro-drop, and nonovert copular clauses, with restrictions related to definiteness of the subject and the position of the object. SV agreement interacts with word order: SV word order shows full agreement (gender and number), while VS word order shows only gender agreement. Arabic is a nominative-accusative language. The subject carries nominative case and the object accusative, regardless of word order. The only exception is when the sentence is introduced by an *ʔinna*-type complementizer, where the preverbal subject is in the accusative.

In Chapter 3, I review previous accounts related to the issue. Under Default Case Analysis (DCA) (Mohammad 2000; Mohammad 1988; Soltan 2006; Ouhalla 1994), nominative subjects in spec,T have their Case valued by a default procedure, in the absence of a Case probe. In the presence of a Case licenser (such as *ʔinna*), subjects in spec,T are available to receive accusative from them. Multiple Case Assignment (MCA) (Bejar and Massam 1999) allows structural nominative Case to be assigned/valued to

the subject in spec,T, then again the subject is available for the accusative probe when the complementizer *ʔinna* is merged into the structure. A third approach is to analyze Case as a reflection of another feature. Leung (2011) proposes that Case is a reflection of the [mood] feature of complementizers. Under this analysis, the nominative-accusative variation depends on the mood of the CP as determined by the complementizer. Pesetsky and Torrego (2001; 2004) propose that Case is an uninterpretable T feature on D. Under that approach, complementizers such as English *that* or Arabic *ʔinna* are, in fact, of category T and have moved to C via head movement. Variation in Case/case can then be taken to reflect different types of T heads.

In Chapter 4, I show that *ʔinna*-type complementizers are Verbal Complementizers (VCs). Unlike other complementizers (null C and conditionals), VCs share some morphological and lexical features with verbs or verblike lexical items. *ʔinna*-type complementizers also share semantic and pragmatic features with verbs indicating assertion, hope, and regret. These morphological and semantic characteristics are not shared with other complementizers. Verbal complementizers in Arabic, like the prepositional complementizer *for* in English, license Case for subjects and value Case for those subjects with the same case value that their (original) lexical category (preposition or verb) would value to its complement (accusative in both cases).

Chapter 5, examines the implications of considering *ʔinna*-type complementizers Verbal Complementizers, and explains case and word order restrictions in the *ʔinna*-clause. Case alternation across different complementizer types are expressed in terms of the presence or lack of the verbal property of the complementizer at hand. Null C and

conditionals lack the verbal property and value Case on their goal subjects as NOM. *ʔinna*-type complementizers are VCs and value Case on their goals as ACC. Word order restrictions are accounted for in terms of EPP: *ʔinna* requires a TP complement that has EPP, while other complementizers accept TP complements with or without EPP. The EPP feature in the *ʔinna* complement TP can be satisfied by the subject in spec,TP, resulting in SV word order. It can also be satisfied by an adjunct AP or PP to the T head, allowing instances of postverbal subjects only in the presence of preverbal adjuncts. Case asymmetry after *ʔinna*, where postverbal subjects are nominative and preverbal subjects are accusative is accounted for as a Spell-Out condition. When the subject and the Case licenser are in the same phonological phrase, i.e. in postverbal subjects, ACC is weakened allowing nominative to appear in the morphology. When the subject is in a different phonological phrase, i.e. with preverbal subjects, ACC is enforced by the need for recoverability, weakening the effect of the verbal property of *ʔinna* and surfacing as the nominative morpheme.

Chapter 6 is the conclusion. It discusses theoretical implications of the proposed analysis in Chapter 5. The proposed analysis weakens DCA and MCA approaches. The anticase account for postverbal *ʔinna* subject is consistent with antiagreement account as a Spell-Out morphological effect, and that account supports the account that Case is a reflect of phi features. The anticase account is argued to be different from DCA, in that DPs are always licensed in the narrow syntax, and the morphological realization of Case is systematically accounted for as a Spell-Out operation.

Finally, given that phi features and Case go hand-in-hand, the implications of

implementing the proposed algorithm in terms of FI versus Agreement are discussed, with pros and cons for each account briefly discussed, and are left for future research.

2. RESEARCH PROBLEM

Clauses introduced by a certain class of Arabic complementizers, known in traditional grammar as *ʔinna and its sisters*, display unique word order and case behavior. The set of *ʔinna*-type complementizers consists of *ʔinna* (that, indeed), *ʔanna* (that), *liʔanna* (because), *kaʔanna* (as if), *lakinna* (but), *layta* (if only), *laʕalla* (hopefully). To help see such unique behavior, I compare *ʔinna* clauses with CPs headed by null complementizers and those headed by conditionals. I begin by giving an overview of word order, Case and agreement in MSA clauses headed by null C (section 2.1). I then provide an overview of CPs headed by conditionals in section 2.2. In section 2.3, I describe in detail word order and case facts of *ʔinna* clauses (clauses introduced by *ʔinna* or one of its 'sisters'). In section 2.4, I describe in general terms the problem with accusative subjects in *ʔinna* clauses.

2.1. Word Order, Case, and Agreement under Null C

In this section, I first describe possible word order variation under null complementizers, then I describe agreement and case facts for each possible word order. This overview of word order is relevant as it highlights the restrictions imposed by *ʔinna*. Facts about agreement are relevant as much of the literature which touches on the case/Case behavior with *ʔinna* do so within the context of what Soltan (2006) refers to as the Subject-Verb Agreement Asymmetry (SVAA).

I assume that a sentence with no overt complementizers is a CP with null C, based on the coordination evidence in 5.

(5) Zaydun yuHibbu mona wa layta mona tuHibbu zaydan (ʔayDan)
Zayd loves Mona and if only Mona loves Zayd (too)
'Zayd loves Mona and hopefully/if only Mona loves Zayd too.'

The two phrases before and after the conjunction *wa* (and) are of the same type. The phrase after *wa* contains a complementizer (*layta*/*laʕalla* – if only/hopefully), indicating that the postconjunction phrase is a CP. This in turn makes the preconjunction phrase, which lacks an overt complementizer, a CP headed by a null C head.

2.1.1. Arabic Word Order

In this section, I first describe word order in sentences with intransitive, transitive, and ditransitive verbs. I will then move to describing word order in sentences with no overt copula. Following Mohammad (2000), I show that in sentences with a subject, a verb, and an object, out of the six logically possible word orders, four are syntactically well-formed. Sentences where both the subject and the object are preverbal are unacceptable. I aim by this description to familiarize the reader with an overview of possible word orders that can be contrasted with the more restricted set of available word orders under *ʔinna*-type complementizers.

In terms of word order, Arabic allows verb-first, verb-second, and pro-drop sentences, as in 6 – 8. DPs ending in /a/ in Arabic do not show case marking for phonological reasons, they are intentionally selected for the examples in this section, as a more detailed discussion of case will follow.

(6) Nadia waSalat
Nadia arrived
'Nadia arrived.'

(7) waSalat Nadia
arrived Nadia
'Nadia arrived.'

(8) waSalat
arrived
(3FS)
'She arrived'

Transitive verbs demonstrate the word orders in 9 – 11, where the object follows the subject.

(9) Nadia qaabalat Nuura
Nadia met Nora
'Nadia met Nora.'
* 'Nora met Nadia.'

(10) qaabalat Nadia Nuura
met Nadia Nora
'Nadia met Nora.'
* 'Nora met Nadia.'

(11) qaabaluu Nadia
met.3mp Nadia
'They met Nadia.'

In double object constructions, the indirect object precedes the direct object (12). The indirect object can also occur as part of PP (13). The word order in 12 is strict, as can be seen in the ungrammaticality of alternative interpretations. The subject-direct object order in 13 is strict, but the two objects have a free word order in dative shift, as can be seen in the grammaticality of 14.

(12) manaHat Nadia Nuura hadaaya
gave Nadia Nora presents
'Nadia gave Nora presents.'
* 'Nora gave Nadia presents.'
* 'Nadia gave presents Nora'

(13) manaHat Nadia hadaaya li-Nuura
gave Nadia presents to-Nora
'Nadia gave presents to Nora.'
* 'Nora gave presents to Nadia'

(14) manaHat Nadia li-Nuura hadaaya
gave Nadia to-Nora presents
'Nadia gave presents to Nora.'
* 'Nora gave presents to Nadia'

The examples above show that in the absence of overt case marking, Arabic allows preverbal and postverbal subjects, and objects maintain a postverbal, postsubject position. Sentences where argument DPs show case marking may have some more flexibility as they relax the relative order requirement between postverbal subjects and objects.

Overt case marking allows for more flexibility in word order. When case marking is not obscured by phonological processes, four of the six logically possible word orders of the subject, verb, and object are possible in Arabic, as the data in 15 (Mohammad 2000:3) shows. Mohammad notes that sentences where both the subject and the object are preverbal are 'marginal' (p.2), and marks them with question marks (15d, 15f). He does not specify in what way they are marginal. I interpret this statement to mean that these sentences (15d and 15f) are ungrammatical under normal (unmarked) contexts, without heavy discourse, presupposition, PF preposing/postposing operations, or splitting the sentence into two phonological phrases. Such interpretation is consistent

with my own intuitions.

(15) a. qaabala zayd-un ʕamr-an
met.3MS zayd-NOM Amr-ACC
'Zayd met Amr.'

b. qaabala ʕamr-an zayd-un
met.3MS Amr-ACC zayd-NOM
'Zayd met Amr.'

c. zayd-un qaabala ʕamr-an
zayd-NOM met.3MS Amr-ACC
'Zayd met Amr.'

d. ?zayd-un ʕamr-an qaabala
zayd-NOM Amr-ACC met.3MS
'Zayd met Amr.'

e. ʕamr-an qaabala zayd-un
Amr-ACC met.3MS zayd-NOM
'Zayd met Amr.'

f. ?ʕamr-an zayd-un qaabala
Amr-ACC zayd-NOM met.3MS
'Zayd met Amr.'

(Mohammad, 2000: 3. his (3))

Arabic exhibits another restriction on sentence-initial DPs: they cannot be indefinite. 16 is grammatical with a definite subject, *al-waziir* (the minister). The subject in 17 and 18 is indefinite; the indefinite subject *waziir* may not be sentence-initial.

(16) al-waziir-u fii lijtimaaʕ-i
the-minister-NOM in the.meeting-DAT
'The minister is at the meeting'.

(17) fii lijtimaaʕ-i waziir-un.
in the.meeting-GEN minister-NOM
'A minister is at the meeting'.

(18) *waziir-un fii lijtimaaʕ-i
minister-NOM in the.meeting-DAT
'A minister is at the meeting'.

Sentences like 18 may be grammatical if the indefinite subject has a certain degree of specificity.[4] I do not attempt to explain this restriction here, but rather take it as a given. This restriction on indefinites is especially important as it is used to show that *ʔinna* assignment of ACC is nonlocal and can be long-distance.

Copular sentences in past and future tense, as well as negative copular sentences show copulas overtly, as can be seen in 19 – 24. The sentences in 19 and 20 are past, 21 and 22 future, and 23 and 24 are negated present copular sentences.

(19) kaanat hind-un ustaathat-an
was Hind-NOM professor-ACC
'Hind was a professor.'

(20) hind-un Kaanat ustaathat-an
Hind was professor
(F.NOM) (3FS) (F-ACC)
'Hind was a professor.'

(21) Sa-takuun hind-un ustaathat-an
will-be Hind professor
(3FS) (f-NOM) (F-ACC)
'Hind will be a professor.'

(22) hind-un satakuun ustaathat-an
Hind will be professor
(F-NOM) (3FS) (F-ACC)
'Hind will be a professor.'

[4] cf. Brustad (2000, p. 21) for a discussion on definiteness in Spoken Arabic and Mohammad (2000:9) for definite subjects in MSA.

(23) laysat hind-un ustaathat-an
is not Hind professor
(3FS) (F-NOM) (F-ACC)
'Hind is not a professor.'

(24) hind-un laysat ustaathat-an
Hind is not professor
(F-NOM) (3FS) (f-ACC)
'Hind is not a professor.'

The examples in 19 – 24 show that the past tense copula (*kaan*), the future tense copula (*sayakuun*), and negative copula (*lays*) have the same word order distribution as transitive verbs; they allow VS and SV word orders. The present declarative counterpart (25) of these sentences does not have an overt copula.

(25) hind-un ustaathat-un
Hind-NOM professor-NOM
'Hind is a professor.'

This type of sentence consists of a subject DP followed by a predicate DP (25), AP (26), or PP (27).

(26) Al-ustaathatu jamiilatun / taʕbaanatun/miSriyyatun
professor beautiful / tired/Egyptian
'The professor (F) is beautiful (F) / tired (F) / Egyptian (F).'

(27) al-astaathithatu fii l-maktabi
the-professors in the-office
'The professors are at the office.'

Word order in null-copular sentences is highly rigid. Any change in the word order in 25 and 26 is marked, perhaps as high rhetoric or focus, which I ignore. In sentences with PP predicates (like 27) the subject is obligatorily sentence-initial, unless it is indefinite where the ban on sentence-initial indefinites kicks in, and the indefinite

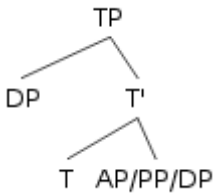
subject occurs after the predicate PP. This data will be relevant in our discussion of whether equative sentences are null-copular sentences, or whether they are indeed verbless, which in turn bear on the discussion of (default) case assignment and *ʔinna*.

2.1.1.1. Null-Copula or Verbless?

Because there is no overt copula in sentences like 25 –27, there has been controversy on whether there is a copula at all. The issue of whether sentences like 25 are null-copular (Bakir, 1980; Fassi Fehri, 1993, 2012, among others) or are 'verbless' (merely a projection, lexical or functional, that does not subcategorize for a VP) (Benmamoun 2000 and references cited there; Aoun et al. 2010) is still largely an open discussion. I will outline very briefly the major arguments for and against a null-copula analysis. The account proposed in this dissertation is concerned with a higher domain than that of the copula (i.e. that of C-T), which makes it compatible with both null-copula and verbless analyses. I adopt the null-copula analysis, merely for ease of exposition.

Proponents of the verbless sentence analysis claim that sentences like 26 have a structure like in 28, where T lacks a [V] feature, hence does not require a copula.

(28)



To support this claim, they contrast verbless sentences with their past and future counterparts (19 – 24) where the predicate shows accusative morphology, unlike verbless sentences (25), where the predicate is in the nominative. If there were a covert

copula, it is hard to explain why the present copula fails to assign the same case as the past and future counterparts.[5]

Additional evidence comes from negation in Moroccan Arabic (Benmamoun 2000). In Moroccan Arabic,[6] negation of copular sentences is achieved via the circumfix *ma-shi* on the copula (29 and 30).

(29) ma-kan-shi Omar f-d-dar
NEG-be.past.3MS-NEG Omar in-the-house
'Omar was not in the house.'

(30) Omar ma-kan-shi f-d.dar
Omar NEG-be.past.3MS-NEG in-the-house
'Omar was not in the house.'

A null-copular analysis would predict that the negative present tense counterpart of these sentences will allow *mashi* in the same positions as their past counterpart, contrary to facts evidenced in 31 and 32, where the sentence in 31 is ungrammatical.

(31) *ma-shi Omar f-d-dar
NEG Omar in-the-house
'Omar was not in the house.'

(32) Omar ma-shi f-d-dar
Omar NEG-be.past.3MS-NEG in-the-house
'Omar was not in the house.'

The same point has been made by Aoun and colleagues (2010). They further support a verbless analysis with data showing that a verbless sentence fails to allow a modal like *yqdar* 'can, may' indicating permission. Bahloul (2008) makes a similar point

[5] This question is related to a larger issue of whether arguments need case, or predicates as well (by virtue of being DPs). In all cases, if we assume that null copulas do not move out of their base position to T, they will be local to the complement, allowing anticase feature suppression to take place at Spell-Out (see anticase account in Chapter 5).

[6] Benmamoun notes that the argument is originally proposed for Egyptian Arabic by Jelinek (1981), but it is also applicable to Moroccan Arabic.

with *qad* 'may' indicating possibility. According to those authors, if there were a null copula, these modals should be allowed in the sentences. Indeed, sentences with modals are only grammatical with the overt present tense verb *yakoon* 'be'.

Proponents of the null-copular analysis, on the other hand, offer an alternative analysis. Fassi Fehri (2012) deals with null copulas as a (lack of) response to agreement requirements. Comparing copular sentences in Arabic, English, and French, he argues that as English and French do not have overt T morphology in present tense, the overt realization of the copula in sentences like 33 and 34 is motivated by agreement with the subject. In Arabic, the counterpart (35) does not require an overt copula because the agreement requirement is not enough to force an overt realization of the copula.

(33) The man *(is) at the house.

(34) L'homme *(est) a la maison.

(35) Ar-rajulu (*yakuunu) fii almanzili

Empirical evidence seems to support a null-copular analysis as well. When morphological content additional to agreement is present, the present copula *yakuun* appears. Take, for example, the auxiliary *qad* (may), which requires an infinitive. In contrasting 36 with 37 and 38, and building on Fassi Fehri's analysis, it can be argued that the presence of *qad* invokes (infinitival) T morphology on the copula, which, together with agreement, are enough to force an overt realization of *takuun*.

(36) hind-un ustaathat-un
Hind-NOM professor-NOM
'Hind is a professor.'

(37) hind-un qad *(takuuna) ustaathat-an
Hind-NOM may be3FS professor-ACC
'Hind may be a professor.'

(38) qad *(takuuna) hind-un ustaathat-an
may be3FS Hind-NOM professor-ACC
'Hind may be a professor.'

The evidence from negation in Moroccan Arabic is not necessarily applicable to MSA. Indeed, the (lack of) parallelism Benmamoun draws in the sentences 29 – 32 does stand in MSA. In MSA, the present tense negation of the so-called verbless sentence is achieved by means of the negative copula *laysa*. The sentences in 23 and 24, repeated here as 39 and 40, show that MSA negated sentences allow the negative copula *laysa* in the same positions that are available for the overt past tense copula. These sentences suggest that in the present tense, the copula with negation is overt, but the copula without negation is covert.

(39) laysat hind-un ustaathat-an
is not Hind professor
(3FS) (F-NOM) (F-ACC)
'Hind is not a professor.'

(40) hind-un laysat ustaathatan
Hind is not professor
(F-NOM) (3s) (F-ACC)
'Hind is not a professor.'

Fassi Fehri (1993:87–88)[7] makes a similar point with *laysa*. He uses agreement morphology (the third person feminine singular *–t* of *laysat*) as evidence that not only is there a copula in the present tense, but that it also projects an AgrP. The other piece of

[7] There are a few typos and a relevant example is misnumbered in this part of the book; they may be a bit confusing at first. The reader is encouraged to approach that reference cautiously.

evidence Fassi Fehri uses to support a null copula analysis is how the so-called verbless sentence interacts with tense. Sentences that contain a verb in the present restrict the use of adverbs of time such as *l-ʔaana* (now) or *l-ʔamsi* (yesterday), as can be seen in the contrast between 41a and 41b.

(41) a. yaaʔkulu r-rajul-u l-ʔaan-a
eats the-man-NOM the-now-ACC
'The man eats now.'

b. *yaaʔkulu r-rajul-u ʔamsi
eats the-man-NOM yesterday
'The man eats yesterday.'
(Fassi Fehri 1993:87, his (3))

The use of a temporal adverb is restricted by the tense of the verb. The sentence in 41b is ungrammatical because the temporal adverb *yesterday* is incompatible with the present tense verb morphology, unlike 41a. Similarly, the sentence in 42b is ungrammatical, while it is grammatical in 42a. Fassi Fehri takes the ungrammaticality of the former to be due to incompatibility between the temporal adverb *ʔamsi* (yesterday) and the tense of the sentence. He further takes this as evidence of the existence of a TP in the sentence, hence a null copula.

(42) a. r-rajul-u mariiD-un l-ʔaan-a
the-man-NOM sick-NOM the-now-ACC
'The man is sick now.'

b. * r-rajul-u mariiD-un ʔamsi
the-man-NOM sick-NOM yesterday
(Fassi Fehri 1993:87, his (4))

It may be easier to explain the nominative case of the complement (rather than accusative) if we stipulate there is no covert copula in sentences like 36, allowing for nominative on the complement via some sort of case copying/agreement/percolation

from the subject, as proposed by Abu-Joudeh (2013) or via a default case analysis where nominative is the morphological case that appears in the absence of a case assigner. However, it is much harder for a verbless-sentence analysis to account for the structural Case licensing of the second DP (*ustaathat*) in 36. It is not possible to assume that predicative DPs in Arabic do not need Case licensing if they acquire their case in some other way. Both proposals – that case on the predicative DP is received via agreement with the subject, and that they do not need Case – are invalidated by the fact that in embedded verbless sentences like 43 the predicate DP *ustaathatan* (professor) shows different case marking from that of the subject. This means that case agreement with the subject does not take place, leaving the need to justify nominative morphology on the predicate as a reflect of syntactic licensing.

(43) qulna ʔinna hind-an ustaathat-un
say1PL that Hind-ACC professor-NOM
'We said that Hind is a professor.'

Furthermore, a verbless-sentence analysis is faced with the burden of explaining why Arabic sentences in all tenses, negative and declarative, should have a verbal projection in their derivation, with the sole exception of present declarative sentence. A unified account that postulates a phonologically null copula is simpler, and preferable, to an account that postulates two different types of predication for largely similar constructions.

In this section, I have briefly outlined arguments for and against a null-copular analysis of subject-predicate sentences. For detailed arguments supporting the existence of a verbal projection in Arabic, as well as its implications to word order and

agreement, the reader is referred to Mohammad (2000) and Mohammad (1989).

2.1.1.2. Word Order with Fronted DPs

While Mohammad (2000:2) notes the marginality of SOV and OSV word orders, he indicates that such word orders are acceptable if there is a resumptive pronoun co-referring with the object. Implementing this to the sentences in 15d and 15f, we get the sentences in 44.

(44) a. Zayd-un amr-an qaabala-hu
Zayd-NOM Amr-ACC met3MS-him
'Zayd met Amr.'

b. amr-an Zayd-un qaabala-hu
Amr-ACC Zayd-NOM met3MS-him
'Zayd met Amr.'

Mohammad notes that 44a and 44b are the counterparts of in 15d and 15f, with the resumptive *–hu* marking the gap. He notes that this is an acceptable word order, more acceptable than the 15 counterparts.

However, there is evidence that the correspondence that Mohammad notes between resumptive pronouns and the acceptability of otherwise ungrammatical sentences is independent from the position of the object. DP extraction from pretty much any island is permitted if it leaves behind a resumptive, as can be seen in 45.

(45) a. Nuura kalbu-*(ha) ʕaDDa Nadia
Nora dog-her bit Nadia
'Nora's dog bit Nadia.'

b. Nuura Zaarat bayt-a-*(ha) Nadia
Nora visited house-ACC-her Nadia
'Nadia visited Nora's house.'

c. amriika ʕaashat Nuura fii-*(ha)
America live Nora in-it
'Nora lived in America.'

The sentences in 45 show that DPs can be extracted from a variety of positions, leaving a resumptive behind. 45 show that a DP (*Nuura*) can be extracted from a Construct State phrase (DP island) in the subject (45a) or object (45b) position, leaving behind a resumptive pronoun (*-ha*). In 45c, the DP *amriika* is extracted from a PP, leaving the resumptive (*fii-ha*).

This data shows that the word orders in 15d and 15f are a type of A-bar movement that involves the left periphery, perhaps focus or topicalization. I will relate some analyses on left-dislocated/topicalized elements and show their relevance to the case/Case assignment in *ʔinna* clauses in the review of literature.

To sum up, section 2.1.1 explores word order variation in MSA. It sets the testing ground for *ʔinna* by showing available word orders in MSA under null-copula. We have seen in this section that out of possible variations (logically possible, or possible under repair techniques such as pauses or the use of resumptive pronouns), available word orders in Arabic can be reduced to four possibilities: VSO, VOS, SVO, and OVS. All other word orders are either ungrammatical or are derived from one of these word orders (e.g. via A' movement for purpose of topicalization or focus). Later sections will test the effect of *ʔinna* on permissible word order in Arabic. Further discussion focuses on those four basic word orders.

2.1.2. Case Marking in Arabic

In the previous section, I have described possible word order variation in Arabic. This section describes case facts across word orders. I show that case marking is largely insensitive to word order. Arabic marks DPs with one of four cases: nominative, accusative, dative, or genitive. The dative case is marked on DPs that are complements of PPs, as can be seen in 46. Genitive marks the second DP in Construct State DPs.

(46) ustaath.u l.Hisaab.i akala mangat-an fii l.maktab.i
professor the.math ate mango in the office
(NOM) (GEN) (ACC) (DAT)
'The math professor ate mango in the office.'

In 46, *Hisaab* is marked with the dative marker *–i* as it is the second word in the '*Idafa*' (Construct state) construction. *Maktab* is marked with the homophonous dative case marker as it is the complement of the preposition *fii*. DPs in the dative or genitive do not interact with *ʔinna*, and I will not discuss them further.

Accusative is marked on DPs that function as adverbials, as can be seen in the accusative marker *–an* on the nominals indicating manner or time in 47.

(47) Al-ustaathu akala mangatan SabaaHan/saʕiidan/musriʕan
the-professor ate mango morning/happy/fast
(NOM) (ACC) (ACC)
'The math professor ate mango in the morning/happily/quickly.'

Complements of overt verbal elements (including overt copula) are in the accusative and subjects are nominative. In 48, *zayd* is marked with the nominative marker *–un* and *ʕamr* is marked with the accusative marker *–an* regardless of the word order.

(48) a. qaabala zayd-un ʕamr-an
met3MS zayd-NOM Amr-ACC
'Zayd met Amr.'

b. qaabala ʕamr-an zayd-un
met3MS Amr-ACC zayd-NOM
'Zayd met Amr.'

c. zayd-un qaabala ʕamr-an
zayd-NOM met3ms Amr-ACC
'Zayd met Amr.'

d. ʕamr-an qaabala zayd-un
Amr-ACC met3MS zayd-NOM
'Zayd met Amr.'

The same facts are true for copular sentences where the copula is overt. In 49 – 54, *hind* carries nominative as the subject and *ustaathat* carries accusative as the complement of the copula.

(49) kaanat hind-un ustaathat-an
was Hind-NOM professor-ACC
'Hind was a professor.'

(50) hind-un Kaanat ustaath-at-an
Hind-NOM was3FS professor-F-ACC
'Hind was a professor.'

(51) satakuun hind-un ustaath-at-an
will be3FS Hind-NOM professor-F-ACC
'Hind will be a professor.'

(52) hind-un sa-takuun ustaath-at-an
Hind-NOM will-be3FS professor-F-ACC
'Hind will be a professor.'

(53) laysat hind-un ustaath-at-an
is.not3FS Hind-NOM professor-F-ACC
'Hind is not a professor.'

(54) hind-un laysat ustaath.at-an
Hind-NOM is not3FS professor-F-ACC
'Hind is not a professor.'

Both objects of ditransitive verbs carry accusative marking, as can be seen in 55, where both objects *albint* and *alsayyarat* show accusative markers.

(55) manaHa al-walad.u al-bint.a al-sayyarat.a
gave3MS the-boy-NOM the-girl-ACC the-car-ACC
'The boy gave the girl the car.'

When the indirect object is preceded by a preposition, it receives DAT, as can be seen in 56 and 57.

(56) manaHat al-bint-u as-sayyarat-a li-l-walad-i
gave3FS the-girl-NOM the-car-ACC to-the-boy-DAT
'The girl gave the car to the boy.'

(57) al-banaat-u manaHna as-sayyarat-a li-l-walad-i
the-girls-NOM gave3FP the-car-ACC to-the-boy-DAT
'The girls gave the car to the boy.'

In section 2.1, I have stated that null-copular sentences consist of a subject DP followed by a predicate DP, AP, or PP. In sentences of the type DP-DP or DP-AP, both phrases carry nominative marking, as can be seen in 58 (repeated from 26 with more detailed morphological description), where both words in the sentence carry nominative markers (*-u* and *–un* respectively, depending on definiteness). In terms of agreement, the two phrases agree in number and gender. In 58, both the subject and the predicate are feminine singular (as indicated by the feminine singular marker *–at*). In 59, both the subject and the predicate are masculine plural, as can be seen in the masculine plural marker *–uun*.

(58) al-ustaath-at-u jamiil-at-un / taʕbaan-at-un/miSriyy-at-un
the-professor-FEM-NOM beautiful / tired/Egyptian-FEM-NOM
'The professor is beautiful/ tired/Egyptian.'

(59) al-muhadis.uun taʕbaan.uun
the-engineers-NOM tired-NOM
'The engineers are tired.'

In sentences with PP complements, the DP complement to P shows DAT, and the subject shows NOM. The examples in 60 show the NOM marker on the definite subject (*-u*) (a), indefinite subject (*-un*) in sentence-initial position (b and c).

(60) a. al-ustaath-u fii l-maktab-i
the-professor-NOM in the-office-DAT
'The professor is at the office.'

b. ustaath-un fii l-maktab-i
professor-NOM in the-office-DAT
'A (certain) professor is at the office.'

c. fii l-maktab.i ustaath-un
in the-office-DAT professor-NOM
'There is a professor at the office.'

All in all, I have shown in this section that word order does not affect case marking. Comparing case data in null-C sentences (and conditionals, which are discussed later) with their *ʔinna*-clause counterparts will detail the research problem. In the next section, we will see that Agreement, on the other hand, shows sensitivity to word order.

2.1.3. Agreement in Arabic

In this section, I give an overview of agreement in Arabic. I start by describing number and gender facts in Arabic, then I describe gender and number agreement as they relate to word order. Unlike case, which is largely insensitive to word order,

subject-verb agreement is sensitive to word order. Verbs agree with preverbal subjects in number and gender, but if the subject is postverbal, the verb shows only gender agreement.

Arabic has two grammatical genders: feminine and masculine, and is realized on nouns and adjectives. The feminine marker is the suffix *–at*, as in:

(61) muhandis-un – muhandis-at-un
engineer-NOM – engineer-f-NOM.

For animates, grammatical gender generally reflects natural gender, such as:

(62) qiT-un – qiT-at-un.
cat-NOM – cat-F-NOM

Inanimate objects also carry grammatical gender, as can be seen in the feminine marker agreement on the following adjective:

(63) madrasat-un kabiir-**at**-un – marsam-un kabiir-un
school-NOM large-**F**-NOM – atelier-NOM large-NOM
'A large school' – 'A large atelier.'

Gender designation of inanimates is arbitrary; there is nothing intrinsic about school or atelier to give them their respective gender in Arabic. Gender assignment for inanimate nouns is also unrelated to the feminine marker *–at*. In 64, although *daar* does not carry a feminine marker, it is grammatically feminine and induces feminine agreement on the adjective *kabiir* when modifying it.

(64) daar-un kabiir-*(at)-un
house-NOM large-f-NOM
'A large house.'

Finally, inanimate plurals are treated as singular feminine as far as agreement is concerned. 65 and 66 show that the plural form of both *madrasat* and *marsam* takes

adjectives that show singular feminine morphology, which is not the case with the animate *muhandisat* in 67, where the adjective following the plural is feminine plural marker *-aat*.

(65) madrasat-un kabiir-at-un – madaris-un kabiir.at-un
school-NOM large-F-NOM – schools-NOM large.f-NOM
'A large school' – 'Large schools'

(66) marsam-un kabiir-un – maraasim-un kabiir-at-un
atelier-NOM large-NOM – ateliers-NOM large-F-NOM
'A large atelier' – 'large ateliers'

(67) muhandis-at-un jamiil-at-un – muhandis-at-aan jamiil-at-aan – muhandis-aat-un jamiil-aat-un

engineer-F-NOM pretty-F-NOM – engineer-F-DUAL.NOM pretty-F-DUAL.NOM – engineer-FP-NOM pretty-FP-NOM

'A pretty female engineer' – 'Two pretty female engineers' – 'Pretty female engineers'

Arabic marks singular, dual, and plural. Regular masculine duals and plurals are marked by *-aan*/*-ayn*/*-ayn* and *–uun*/*-iin*/*-iin* for nominative/accusative/dative respectively, as can be seen in 68, irregular (broken) plurals are built via root-and-pattern morphology (69).

(68) muhandis muhandis-aan/ayn muhandis-uun/iin
engineer engineer-DUAL-NOM/ACC engineer-PL-NOM/ACC

(69) rajul-un – rijaal-un, kitaab-un – kutub-un
man-NOM – men-NOM book-NOM – books-NOM

Feminine dual markers are the same as masculine counterparts. Feminine plurals are marked by *–aat*, as can be seen in 70.

(70) Muhandis-at-un muhandis-at-aan/ayn muhandis-aat-un/in
engineer-F-NOM engineer-F-DUAL.NOM/DUAL.ACC engineer-FP-NOM/ACC

I now turn to describing how SV agreement in Arabic interacts with word order. The verb always shows person agreement. In SV word order, the verb also shows number and gender agreement. For example, in 71, the verb *manaH* agrees with the plural feminine preverbal *albanaat*, by the agreement marker *–na*, showing both gender and number.

(71) al-banaat-u manaHna as-sayyarat-a li-l-walad-i
the-girls-NOM gave3FP the-car-ACC to-the-boy-DAT
'The girls gave the car to the boy.'

VS word order, on the other hand, shows only partial agreement morphology on the verb, where only gender, but not number, appears on the verb. In 72, the verb *manaH* shows the feminine singular marker *–at* regardless of the subject being singular (*albint*) or plural (*albanaat*).

(72) manaH**at** al-bint-u/al-banaat-u as-sayyarat-a li-l-walad-i
gave the-girl-NOM/the-girls-NOM the-car-ACC to-the-boy-DAT
(3FS) (fs) /(fp) (fs) (fs)
'The girl/girls gave the car to the boy.'

The same facts are true for masculine subjects: in 73, the verb shows third person masculine singular agreement with both singular (*alwalad*) and plural (*alʔawlaad*) subjects.

(73) manaHa al-walad-u / al-ʔawlaad-u al-bint-a as-sayyarat-a
gave the-boy-NOM/ the-boys-NOM the-girl-ACC the-car-ACC
(3MS) (ms) / (mp) (fs) (fs)
'The boy/boys gave the girl the car.'

In 74, the verb in SV position shows singular masculine agreement *–a* with the singular subject in 74a and plural masculine agreement *–uu* with the plural subject in 74b.

(74) a. al-walad-u manaHa al-bint-a as-sayyarat-a
the-boy-NOM gave the girl-ACC the-car-ACC
(MS) (3MS) (FS) (FS)
'The boy gave the girl the car.'

b. alʔawlaad-u manaH-uu al-bint-a as-sayyarat-a
the boys-NOM gave-ACC the-girl-ACC the-car-ACC
(MP) (3MP) (FS) (FS)
'The boys gave the girl the car.'

As for null-copular sentences, the two phrases (subject and predicate) agree in number and gender. In 75, both the subject and the predicate are feminine singular (as indicated by the feminine singular marker *–at*). In 76, both the subject and the predicate are masculine plural, as can be seen in the masculine plural marker *–uun*.

(75) al-ustaathatu jamiilatun / taʕbaanatun/miSriyyatun
the-professor beautiful / tired/Egyptian
(DEF-prof-FS-NOM) (FS-adj-INDEF-NOM))
'The professor is beautiful/ tired/Egyptian.'

(76) al-muhadisuun taʕbaanuun
the-engineers tired
(DEF-MP-NOM) (INDEF-MP-NOM)
'The engineers are tired.'

2.1.4. Case Marking on Fronted DPs

In section 2.1.1.1, I noted Mohammad's (2000) restrictions on word order that arguments can be preposed leaving a resumptive pronoun, and that would obtain some word orders that are not otherwise permissible, especially in relation to the object occurring before the subject. This section describes case facts related to this type of fronting. Data related to this type of fronting will bear on our discussion in later sections on Case assignment, and on the structure and Case behavior in sentence-initial DPs in

Arabic.

According to Mohammad (2000:151–152), fronted (scrambled) objects maintain their case marking, as can be seen in 77 – 79, where *ʔaxaahu* is marked accusative in its canonical word order (77), scrambled across the subject (78), or fronted (79). The sentences in 77 – 79 do not involve a resumptive pronoun coreferring with the fronted element.

(77) raʔaa l-walad-u ʔax-aa-hu
saw3MS the-boy-NOM brother-ACC-his
'The boy saw his brother.'
(Mohammad 2000:151)

(78) raʔaa ʔax.aa-hu l-walad-u
saw3MS brother-ACC-his the-boy-NOM
'The boy saw his brother.'
(Mohammad 2000:151)

(79) ʔax-aa-hu raʔaa l-walad.u
brother-ACC-his saw3MS the-boy-NOM
'The boy saw his brother.'
(Mohammad 2000:152)

It is possible for the fronted object to be marked nominative, according to Ryding (2005) and Badawi et al. (2003). They both refer to the construction as a 'topic-comment construction.' The examples in 80 and 81 are a case in point.[8]

(80) haathihi l-furSat-u na-jidu-ha fii l-qaahirat-i
this def-opportunity-NOM we-find-it in Cairo-DAT
'We find this opportunity in Cairo.'
(adapted from Ryding 2005:67, her (56))

[8] The similarity of the internal DP structure of the fronted object is incidental. The data in both references are corpus-based, and it seems that this construction is very common.

(81) haathihi l-mihnat-u tuqaabilu-ha ʕiddat-u SuʕubaatNin
this def-profession-NOM meet-it many-NOM difficulties-DAT
'Many difficulties face this profession.'
(Badawi et al. 2003:327)

In the two sentences in 80 and 81, the fronted DP *haathihi lfurSatu*/*hathihi lmhnatu* 'this opportunity/this profession' are marked with nominative (*-u*), leaving a resumptive pronoun in the accusative (the clitic *–ha*) in the object position. We know that the sentence-initial DP is not the subject of the verb because the verb shows first person subject agreement in 80, and not the expected third person if *this opportunity* were the subject of the sentence. The nominative case is not exclusively associated with fronted elements extracted from object position. Fronted DPs out of PPs, for example, also have nominative case marking, as in 82.

(82) **al-ʕarab-u**$_i$ kaanat la-**hum**$_i$ ʕilaaqat-un bi-Hayaat-i ʔisbaanyaa
the-arabs-NOM was to-them relation-NOM with-life-DAT Spain
'Arabs had a relation with the life of Spain.'

The fronted DP *alʕarabu*, which carries the nominative marker *–u*, is extracted from its original position as complement to the preposition *la*, marked by the dative resumptive pronoun *–hum*.

The data above suggests that the resumptive pronoun and case maintenance of the fronted DP are in complementary distribution. In Mohammad's data, the accusative element is not associated with a resumptive (i.e. a DP maintains its Case/case if it is not associated with a resumptive), and in Badawi and Ryding data, the nominative element is associated with a resumptive that shows a different case (i.e. if the resumptive keeps the case/Case in the extraction site, the fronted DP shows nominative). In fact, Bakir (1980) argues extensively that, indeed, this is the case, and uses this fact to argue that

there are two types of fronting: topicalization (for the nominative-resumptive sentences) and left-dislocation (for the case maintenance-gap sentences).

When stating the research problem in the next chapter, I will show that DPs that had already been licensed and valued for nominative as subjects unexpectedly show ACC morphology. When describing data that shows the details of this problem, (object) left-dislocated DPs that maintain their accusative case will not shed much light on the problem, as they are sentence-initial and are expected to show ACC anyway. This type of data, hence, will be ignored when describing the research problem.

So far, we have seen a description of possible word order and case properties of Arabic sentences headed by null complementizers. Arabic allows SV(O) and VS(O) word orders. OVS is only allowed as part of A' fronting (focusing or left-dislocation). Sentences without an overt verb have a null copula. Arabic is a nominative-accusative language. Subjects are nominative, and objects are accusative, regardless of word order. Verbs agree with their subjects in number, gender, and person in SVO word order. In VS word order, only partial agreement (person and gender) obtains on the verb.

2.2. Arabic Conditional Phrases

This section describes the first type of overt complementizers: conditionals. I will show here that CPs introduced by conditionals have the same word order, case, and agreement properties as those introduced by null complementizers. The next section, in contrast, will show that *ʔinna*-type complementizers impose restrictions on word order and case which are not shared by conditionals or null complementizers.

Arabic has four conditionals:

(83)	ʔitha	ʔin	law	lawla
	if (type I)	if (type II)	if (type III)	if not (unless)

I gloss the first three conditionals as *if* introducing different types of conditionals. The three types of conditionals differ in terms of the likelihood of the event in the conditional clause as the following examples show. *ʔitha* is used when the event indicated by the verb in the conditional clause is certain to happen:

(84)	ʔitha	waSal-ta	l-bayt-a	kallem-ni
	if	arrived-you	the-home-ACC	talk.to-me

'If you arrive home call me.' ; 'call me when you get home.'

Phrases introduced by *ʔin* indicate that the event of the conditional clause is unlikely:

(85)	ʔin	waSal-ta	mubakkir-an	kallem-ni
	if	arrived-2MS	early-ACC	talk.to-me

'If you arrived early call me.'

law introduces an impossible, hypothetical, or counterfactual phrase:

(86)	law	kun-tu	r-raʔiis-a	la-rafaʕ-tu	l-ʔujuur-a
	if	was-1S	the-president-ACC	then-raised-1S	the-salaries-ACC

'If I were the president, I would have raised salaries.'

lawla, meaning 'if not for' also indicates impossibility in a reverse manner: the second predication is impossible because the first is true, as can be seen in 87. Morphologically, it is made up of *law* and the negation particle *laa*.

(87)	lawla	(faaza) Obama	la-faaza	l-jumhuuri-uun
	if.not	(won) Obama	then-won	the-rupublicans-NOM

'If it were not for Obama, the Republicans would have won.';
'If Obama had not won, the Republicans would have won.'

I do not discuss in detail the use or differences between the three conditional particles. In terms of word order, conditionals seem to allow all four SV(O) word orders allowed under null complementizers, as can be seen in the sentences in 88 – 90. The

sentences in a show that VSO word order is possible for each of the conditionals. The sentences in b show examples of VOS, c SVO, and d show that OVS word order is possible for each of the conditional complementizers.

(88) a. law qaabala zayd-un ʕamr-an la-Htadana-hu
if met3MS zayd-NOM Amr-ACC then-hug3MS-him
'If Zayd met Amr, he would hug him.'

b. law qaabala ʕamr-an zayd-un la-Htadana-hu
if met3MS Amr-ACC zayd-NOM then-hug3MS-him
'If Zayd met Amr, he would hug him.'

c. law zayd-un qaabala ʕamr-an la-Htadana-hu
if zayd-NOM met3MS Amr-ACC then-hug3MS-him
'If Zayd met Amr, he would hug him.'

d. law ʕamr-an qaabala zayd-un la-Htadana-hu
if Amr-ACC met3MS zayd-NOM then-hug3MS-him
'If Zayd met Amr, he would hug him.'

(89) a. ʔitha qaabala zayd-un ʕamr-an fa-saya-Htadana-hu
if met3MS zayd-NOM Amr-ACC then-will-hug3MS-him
'If Zayd meets Amr, he will hug him.'

b. ʔitha qaabala ʕamr-an zayd-un fa-saya-Htadana-hu
if met3MS Amr-ACC zayd-NOM then-will-hug3MS-him
'If Zayd meets Amr, he will hug him.'

c. ʔitha zayd-un qaabala ʕamr-an fa-saya-Htadana-hu
if zayd-NOM met3MS Amr-ACC then-will-hug3MS-him
'If Zayd meets Amr, he will hug him.'

d. ʔitha ʕamr-an qaabala zayd-un fa-saya-Htadana-hu
if Amr-ACC met3MS zayd-NOM then-will-hug3MS-him
'If Zayd meets Amr, he will hug him.'

(90) a. ʔin qaabala zayd-un ʕamr-an la-Htadana-hu
if met3MS zayd-NOM Amr-ACC then-hug3MS-him
'If Zayd met Amr, he would hug him.'

b. ʔin qaabala ʕamr-an zayd-un la-Htadana-hu
if met3MS Amr-ACC zayd-NOM then-hug3MS-him
'If Zayd met Amr, he would hug him.'

c. ʔin zayd-un qaabala ʕamr-an la-Htadana-hu
if zayd-NOM met3MS Amr-ACC then-hug3MS-him
'If Zayd met Amr, he would hug him.'

d. ʔin ʕamr-an qaabala zayd-un la-Htadana-hu
if Amr-ACC met3MS zayd-NOM then-hug3MS-him
'If Zayd met Amr, he would hug him.'

In terms of tense,[9] conditionals show a very strong tendency to select past complements, as is seen in the sentences 88 – 90. It is possible, albeit uncommon, that the conditional phrase be in the present tense. The main clause may or may not match the tense of the conditional clause. In 91, the conditional clause is in the past tense, and the main clause can be in the present or future. Users of MSA find conditional phrases in the present tense acceptable when they see them, but usually do not produce them because, I speculate, this structure is common in Classical Arabic (CA), Quranic and religious texts. Although all the above examples involve pronouns in the second part of the conditional, this choice is not mandated by grammar - merely for convenience. The then-clause does not need to have a pronoun (resumptive or otherwise). In 91, for example, the second clause (*Republicans will rejoice*) has no pronominal reference to the *if* statement. This fact is true for all conditional sentences.

(91) law faaza romny la-fariHa/sa-yafraHu l-jumhuuriyuun
if won Romny then-rejoice/will-rejoice the-republicans
'If Romny wins, Republicans will rejoice.'

[9] Although I refer to this restriction in terms of tense, the selectional restriction may well be that of a perfective aspect.

Whether conditionals allow null copulas, and what possible word orders available is inconsistent across conditionals. Recall that null-copular sentences allow DP-DP/AP/PP word order, as well as PP-DP provided that the DP is indefinite. Overall, conditionals introducing null-copular sentences in MSA are found ungrammatical by myself and my language informants.[10] However, some sentences are worse than others. The sentences in 92 – 95 show the best (least objectionable) sentences I could elicit. Sentences in a are with *law*, in b with *itha*, and c with *ʔin*. The number of question marks (indicating 'marginality') is based on how varied the responses I received from informants, and how strongly they (dis)agree with a certain sentence.

(92) DP-PP

a. ? law zayd-un fii d-ddaar-i la-qaabala-ni
if Zayd-NOM in the-house-DAT then-met-me
'If Zayd were at home, he would have met me.'

b. ? sa-ʔu-qaabilu-hu itha huwwa fi d.daar.i
will-1s-meet-him if he in the-house-DAT
'I will meet him if he is at the house.'

c. ?? uqaabilu.hu ʔin huwwa fi daari-hi
meet1s-him if he in house-his
'I would meet him if he were at his hous.'

(93) PP-DP

a. law fi d-daar-i rajul-un la-qaabala-ni
if in the-house-DAT man-NOM then-meet3MS-me
'If there were a man in the house, he would have met me.

[10] I have also spent about 30 hours looking at concordances of conditionals in newspaper and modern literature corpora in ARABICorpus (www.arabicorpus.byu.edu), and could not find any instances of a conditional followed by a null-copular complement. The concordance tool in the corpus does not allow for a search of the type 'conditional followed by words that are nonverbal all the way to the following period.' So, I had to resort to other less efficient techniques. Just because I could not find any results does not mean there are not any, and even if the construction is indeed absent in the corpus, this does not necessarily mean it is ungrammatical. However, this result is enough to raise deep suspicions about null-copular conditionals in MSA.

b. ʔ ʔitha fi d-daar-i rajul-un fa-sa-yuqaabala-ni
if in the-house-DAT man-NOM then-fut-meet3MS-me
'If there is a man in the house, he will meet me.'

c. ??? ʔin fi d-daar-i rajul-un la-qaabala-ni
if in the-house-DAT man-NOM then-met-me
'If there were a man in the house, he would meet me.'

(94) DP-AP

a. law r-rajul-u murattab-un uHibbu-hu akthar
if the-man-NOM tidy-NOM like1S-him more
'If a man is tidy I would like him (even) better.'

b. ʔitha r-rajul-u murattab-un uHibbu-hu akthar
if the-man-NOM tidy-NOM like1S-him more
'If a man is tidy I would like him (even) better.'

c. ?? ʔin r-rajul-u murattab-un uHibbu-hu akthar
if the-man-NOM tidy-NOM like1S-him more
'If a man is tidy, I would like him better.'

(95) DP-DP

a. uqaabilu-hu law huwwa axuu-ka
meet1S-him if he brother.NOM-your
'I will meet him if he is your brother.'

b. ʔaaxuthu-ha itha hiyya hadiyyat-un
take1S-it if it.fem gift-NOM
'I will take it if it is a gift.'

c. ? ʔaaxuthu-ha ʔin hiyya hadiyyat-un
take1S-it if it.fem gift-NOM
'I will take it if it is a gift.'

The degraded status of null-copular conditionals might follow from the overall tendency of MSA to prefer past tense in the conditional clause. The acceptability of the sentences in 92 – 95 might be due to interactions between MSA and dialects. For example, sentences with *law* are found less degraded than ones with *itha*. In Egyptian

Arabic, *law* may introduce a null-copular sentence, while *itha* may do so only for a subsection of the population. The sentences in 95 are overall better than other sentences, but they all have pronominal subjects. Pronouns in Egyptian Arabic are indicated to have some copular properties, as noted by Eid (1983).

In terms of case and agreement, conditional sentences do not display any different behavior than that of null-C sentences, as can be seen in 88 – 95. Preverbal and postverbal subjects are nominative, and so are subjects and complements of null-copular sentences. Objects and complements of overt copulas are accusative. Verbs agree with preverbal subjects in number and gender, and agree with postverbal subjects in gender only.

2.3. The *ʔinna* Clause

Now that we have seen word order and case/Case properties of Arabic sentences, I move to the data that is at the core of this dissertation. This section will describe word order and case behavior in ʔinna clauses. As we will see in the next section (2.4), the case and word order properties unique to clauses introduced by this class of complementizers need to be explained.

ʔinna and its sisters pose a restriction on word order in the clauses they head, and they induce accusative marking on the otherwise nominative subjects. In 2.3.1, I first give an inventory of *ʔinna* and its sisters and their distribution, then I move to describing permissible word orders in *ʔinna* clauses. This section will intentionally use many examples where DPs are not overtly marked for case, to keep the discussion focused on word order. The next section will describe case marking and agreement in

sentences introduced by *ʔinna* and its sisters.

2.3.1. *ʔinna* and Its Sisters

In this section, I list the members of the *ʔinna* family and their meaning. *ʔinna* has six 'sisters', listed in 96. Morphological analysis will show that three of the members are morphologically complex, consisting of one of the other sisters combined with a conjunction.

(96)

ʔanna	liʔanna	kaʔanna	lakinna	layta	laʕalla	ʔinna
that	because	as if	but	if only	hopefully	indeed/that

liʔanna and *kaʔanna* are morphologically related to *ʔanna*. They are composed of *ʔanna* preceded by *ka-* ('like,' indicating similarity) and *li-* ('because,' indicating reason). The two complementizers, respectively, mean 'for/because that…' and 'it is the same as that….' To illustrate, consider 97 and 98, where *ka-* is used to connect DPs and indicate similarity. *kaʔanna* is used in 99 and 100 to show similarity in a larger sense; states-of-affair introduced by complete sentences.

(97)

uHibu.hu	**ka**-ʔax-i
love1S.him	like-brother-my

'I love him like my brother.

(98)

zayd-un	qawwi-un	**ka-**l-ʔasad-i
Zayd-NOM	strong-NOM	like-the-lion-DAT

'Zayd is as strong as a lion.'

(99)

uHibu.hu	**ka**ʔanna-hu	ax-i
love1S-him	as-if-him	brotherther-my

'I love him as if he were my brother.'

(100)

kaʔanna	zayd-an	mariiD-un
as.if	Zayd-ACC	sick-NOM

'It is as if Zayd is sick.' / 'Zayd seems sick.'

Similarly, *li-* ‘to’ is used to indicate cause or reason, as can be seen in 101 and 102.

(101) saafara **li**-yadrus-a
traveled-3MS to-study3MS-SUBJ
‘He travelled to study.’

(102) ʔishtara kitaab-an **li**-yaqraʔa-hu
bought3MS book-ACC to-read3MS-it
‘He bought a book to read it.’

Combining *li-* with *ʔanna* ‘that’, liʔanna introduces a clause that is a cause/explanation of the main clause, as can be seen in 103 and 104.

(103) saafara **li**ʔanna-hu mariiD-un
traveled3MS because-he.ACC sick-NOM
‘He travelled because he is sick.’

(104) ʔishtara l-kitaab-a **li**ʔanna-hu yuHilbbu Shakespeare
bought3MS the-book-ACC because-he.ACC love3MS Shakespeare
‘He bought the book because he loves Shakespeare.’

Similarly, *lakinna* is composed of the conjunction *laakin* (but) and *ʔinna* (indeed/that). The sentence in 105 shows that *laakin* can be used to conjoin two DPs (Zayd and Amr).

(105) lam yusaafira zayd-un **laakin** ʕamr-un
did-not travel3MS Zayd-NOM but Amr-NOM
‘Zayd did not travel, but Amr.’

As a complementizer, *laakinna* may only introduce a full clause, as can be seen in the ungrammaticality of 106, which is identical to 105 except in the use of *laakinna* rather than *laakin*.

(106) *lam yusaafira zayd-un **laakinna** ʕamr-un/ ʕamr-an
did-not travel3MS Zayd-NOM but Amr-NOM/Amr-ACC
‘Zayd did not travel, but Amr.’

laakin can be used, nonetheless, to introduce a complete clause, as in 107, where

laakinna indicates a contrast between the two clauses before and after it.

(107) saafara zayd-un **laakinna** ʕamr-an kaana mariid-an
travelled3MS Zayd-NOM but Amr-ACC was3MS sick-ACC
'Zayd travelled, but Amr was sick.'

Knowing the morphological composition of *kaʔanna*, *laakinna*, and *liʔanna* will help us reduce the number of complementizers that need to be investigated in detail in subsequent sections. We have seen that morphologically they are related to *ʔinna* and *ʔanna*. The rest of this section will show that all sisters of *ʔinna* share distribution and case/Case properties. After we have established that these three complementizers conform morphologically and syntactically to the same behavior of *ʔinna* and *ʔanna*, detailed discussions will ignore them for convenience. The *ʔinna* family, then, will be considered to consist of four members only (*ʔinna, ʔanna, layta, laʕalla*), with the implication that the other three members are only morphological derivatives of *ʔinna* and *ʔanna*.

layta is used to express regret, as can be seen in 108, where *layta* expresses that the speaker regrets that the proposition of the complement to *layta* is not true; a wish that it were.

(108) layta zayd-an qaabala ʕamr-an
if only zayd-ACC met3MS Amr-ACC
'If only Zayd had met Amr.' or 'I wish Zayd had met Amr.'

laʕalla is used to express the speaker's hope that the proposition in the complement is/will be true:

(109) laʕalla l-jaww-a (sa)yataHassanu ɣdadan
hopefully the-weather-ACC (fut.)improve3MS tomorrow
'Hopefully the weather will improve tomorrow.'

All seven complementizers seem to express a belief or attitude of the speaker about the proposition of the sentence – that of assertion (*ʔinna* and *ʔanna*)[11], hope (*laʕalla*), or regret (*layta*). This may explain why *layta* and *laʕalla* are part of this set, although they may not be considered complementizers in other languages. More importantly, they occur in complementary distribution with the other sisters, and they display the same case effects and word order requirements.

2.3.2. *ʔinna* and Its Sisters: Distribution

ʔinna and its sisters can introduce independent clauses, as well as subordinate clauses, with the restrictions I outline in this section. Five of the seven complementizers may introduce an independent clause: *ʔinna, kaʔanna, lakinna, layta, laʕalla*, as can be seen in 110 – 117.

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[11] At matrix CPs, it is harder to see how *ʔinna* and *ʔanna* indicate assertion. After all, a sentence with a null complementizer can also be considered an assertion. The literature on *ʔinna* and *ʔanna* usually gloss them as 'indeed' to show emphasis. It is also easier to see the difference in embedded clauses. Compare:

i.	na.ʕrifu	ʔinna/*ʔin	nadia	fii	l-mabna	
	we.know	that/*if	Nadia	in	the-builiding	
	'We know that Nadia is in the building.'					
ii.	laa na-ʔrifu	*ʔinna/ʔin	kaanat	nadia	fii	l-mabna
	not we-know	*that/if	were	Nadia	in	the-builiding
	'We do not know if Nadia is in the building.'					

When the subordinate clause is factual, as indicated by the matrix verb 'know,' *ʔinna* is used. When it is doubtful, as indicated by 'we do not know,' *ʔin* is used, in a restriction comparable to the English that/whether (if). Comparing ii to iii where the verb *know* is negated, but is in the past:

iii.	lam	na-ʕrifu	ʔinna/ʔin	kaanat	nadia	fii	l-mabna
	not.past	we-know	that/if	were	Nadia	in	the-builiding
	'We did not know if Nadia was in the building.'						

The sentence is acceptable with both subordinators. *ʔinna* indicates that Nadia indeed was in the building, but we did not know that fact, while *ʔin* indicates that the truth of the subordinate proposition is unknown.

(110) zayd-un qaabala ʕamr-an
zayd-NOM met3MS Amr-ACC
'Zayd met Amr.'

(111) ʔinna zayd-an qaabala ʕamr-an
indeed zayd-ACC met3MS Amr-ACC
'Indeed Zayd met Amr.'

(112) kaʔanna zayd-an qaabala ʕamr-an
it.is.as.if zayd-ACC met3MS Amr-ACC
'It seems as if Zayd met Amr.'

(113) layta zayd-an qaabala ʕamr-an
if.only zayd-ACC met3MS Amr-ACC
'If only Zayd had met Amr.'

(114) laʕalla zayd-an qaabala ʕamr-an
hopefully zayd-ACC met3MS Amr-ACC
'Zayd hopefully met Amr.'

(115) lakinna zayd-an qaabala ʕamr-an
but zayd-ACC met3MS Amr-ACC
'But Zayd met Amr.'

(116) *ʔanna zayd-an qaabala ʕamr-an
that zayd-ACC met3MS Amr-ACC
'Zayd met Amr.'

(117) *liʔanna zayd-an qaabala ʕamr-an
because zayd-ACC met3MS Amr-ACC
'Because Zayd met Amr.'

lakinna may need some contextual support. It is used to indicate (the speaker's belief) that whatever comes after it contradicts already stated or implied assumptions in the conversation. In the presence of such context, *lakinna* can introduce an independent clause, as is evident by the grammaticality of 115. *ʔanna* and *liʔanna* may not introduce

an independent clause, as can be seen by the ungrammaticality of 116 and 117.

Two of the complementizers do not introduce a subordinate clause: *layta* and *laʕalla*. They can only introduce matrix clauses. Verbs that indicate hope or regret in Arabic do not select a CP complement introduced by these complementizers, as can be seen in the ungrammaticality of 118 and 119.

(118) *nadimtu/ tamanayytu layta zayd-an qaabala ʕamr-an
regretted1S/hoped1S if.only zayd-ACC met3MS Amr-ACC
'I wished/regretted if only Zayd had met Amr.'

(119) *tamanayytu laʕalla zayd-an qaabala ʕamr-an
hoped1S hopefully zayd-ACC met3MS Amr-ACC
'I hoped Zayd hopefully met Amr.'

The verbs expressing hope and regret above take infinitival TP complements instead, as can be seen in 120. The verb *tamanayytu* (I hope) has an infinite TP complement introduced by the infinitival *ʔan* (to).

(120) tamanayytu **ʔan** yuqaabala zayd-un ʕamr-an
hoped1S to meet zayd-NOM Amr-ACC
'I hoped for Zayd to meet Amr.'

The ungrammaticality of 118 and 119 may not be surprising, given that the meaning of hope or regret is already encoded in the complementizer, making the verbs *tamanna* (hope) or *nadim* (regret) selecting one of the two complementizers superfluous.

liʔanna introduces only subordinate clauses. The verb in the matrix clause does not have to be a 'subordinating' verb, a verb that takes a CP complement. Any verb can be used in the matrix verb position in 121. Recall from the last section that *laakinna* is morphologically the conjunction *laakin* (but) and *ʔinna* (indeed). The conjunction *but* does not require any specific kind of verb in a higher position, which can explain why

laakinna can occur so freely in subordinate clauses, and why it can **only** introduce subordinate clauses. The conjunction part of *liʔanna* needs a higher clause to conjoin to.

(121) Saafara/naama/ta*ʔaxxara* liʔanna-hu mariiD-un
traveled3MS/slept3MS/was.late3MS because-he sick-NOM
'He travelled/slept/ran late because he is sick.'

kaʔanna can introduce a subordinate clause, interchangeably with ʔ*anna*, as can be seen in the grammaticality of both 122 and 123. *kaʔanna* is used to indicate that the speaker thinks the subordinate clause is not true (I am not sick, I feel as if I were), while *ʔanna* is used to indicate that the speaker thinks the subordinate clause is true (I feel I am sick).

(122) ʔa<u>sh</u>ʕuru ʔann-i mariiD-un
feel1S that-I sick-NOM
'I feel that I am sick.'

(123) ʔa<u>sh</u>ʕuru kaʔann-i mariiD-un
feel1S as.if-I sick-NOM
'I feel as if I am sick.'

ʔinna and *ʔanna* may introduce subordinate clauses. They occur in complementary distribution, depending on the selecting verb. *qaal* 'say' selects *ʔinna* (124), while all other verbs of saying (such as *iddaʕa* – claim) select *ʔanna* (125).

(124) qaala ʔinna/*ʔanna zayd-an qaabala ʕamr-an
say3MS that zayd-ACC met3MS Amr-ACC
'He said that Zayd met Amr.'

(125) iddaʕa *ʔinna/ʔanna zayd-an qaabala ʕamr-an
claim3MS that zayd-ACC met3MS Amr-ACC
'He claimed that Zayd met Amr.'

2.3.3. *ʔinna* and Its Sisters: Word Order

This section is concerned with what word orders are possible in the *ʔinna*-clause; matrix and embedded CPs headed by *ʔinna* or any of its sisters. Regardless of the type of clause (matrix or embedded) and the actual complementizer, word order restrictions are the same for the *ʔinna*-clause. For ease of exposition, I will mainly give data with *ʔinna* heading a main clause. Unless otherwise stated, the reader is free to assume that examples are also applicable to any of *ʔinna's* sisters, in their respective clauses.

I will first show restrictions on permissible word orders in sentences that contain overt verbal elements; that a verb may not directly follow *ʔinna*. I then move to describing *ʔinna* interaction with word order in null-copular sentences; that *ʔinna* does not impose any additional word order restrictions. Finally, I describe word order in sentences with topicalized DPs, showing that *ʔinna* may precede DPs extracted from any phrase.

In terms of word order, *ʔinna* may not be followed by a verb. The VS sentence in 127 is ungrammatical, while its SV counterpart in 126 is grammatical.

(126) ʔinna Nadia waSalat
indeed Nadia arrived3FS
'Indeed the girls arrived.'

(127) *ʔinna waSal.at Nadia
indeed arrived Nadia
'Indeed Nadia arrived.'

This restriction means that out of the four word orders that we consider acceptable in 15, only two word orders are acceptable complements to *ʔinna*: SV(O), as in 126 above and OVS, as in 128. Note that in 128 neither DP shows case marking, but single

masculine agreement on the verb and the feminine resumptive object pronoun *-ha* indicate that *Hamza* (a man's name) is the subject, and *Nadia* the object.

(128) ʔinna Nadia qaabala-ha Hamza
indeed Nadia met3MS-her Hamza
'Indeed, Nadia, Hamza met her.'

The other two acceptable word orders in 15, VSO and VOS, are only acceptable if the verb is separated from *ʔinna* by an adjunct or an expletive pronoun. In 129, *ʔinna* is followed by an adverbial, *lyawm* (today), and the verb-first complement is acceptable. Without *lyawm* the sentence is ungrammatical.

(129) qaala ʔinna *(lyawwm-a) tattaDiHu Haqiiqat-u l-ʕayyinaat-i
said3MS that today-ACC become-clear3FS truth-NOM the-samples-GEN
'He said that today the truth about the samples comes out'

The adjunct separating *ʔinna* and the verb can also be a PP. In 130, the complement to *ʔinna* is has VS word order, but the verb *yaʔkulu* (eat) is separated from *ʔinna* by the PP adverb of place *fii l-yabaan* (in Japan), and the sentence is grammatical. The omission of the adjunct renders the sentence ill-formed.

(130) samiʕtu ʔanna *(fii l-yabaan-i) yaʔkulu r-rijaal-u ʔasamak-an saamat-an
heard1S that in Japan-DAT eat the-men-NOM fish-ACC poisonous-ACC
'I heard that in Japan men eat poisonous fish.'

The other case where the *ʔinna* clause may have a VS word order is when the complement is introduced by an expletive pronoun. Indeed, if *ʔinna* is followed by an expletive or an adverbial, the restrictions on word order are lifted, and all well-formed word orders without *ʔinna*, which we have discussed in section 2.1, are available and

grammatical. The sentences in 131 show this fact. The sentences with the expletive (the clitic –hu; third person masculine singular) can be followed by SV (as in a), VS (b), all the already well-formed null-copular sentences c – e.

(131) a. ʔdaaf-at ʔinna-hu Nadia saafar-at
added-3FS that-expl Nadia traveled-3FS
'She added that Nadia travelled.'

b. ʔdaaf-at ʔinna-hu saafar-at Nadia
added-3FS that-expl travelled-3FS Nadia
'She added that Nadia travelled.'

c. ʔdaaf.at ʔinna-hu Nadia ɣaneyyat-un
added.3FS that-expl Nadia rich-NOM
'She added that the Nadia is rich.'

d. ʔdaaf-at ʔinna-hu Nadia fii l-hind-i
added-3FS that-expl Nadia in the-India-DAT
'She added that Nadia is in India.'

e. ʔdaaf-at ʔinna-hu fii bayt-i-na rajul-un
added.3FS that-expl in house-DAT-our man-NOM
'She added that a man is in our house.'

Agreement patterns point to the direction that the pronoun indeed is a non-referential; an expletive pronoun. The subject of the sentences is *Nadia*, feminine, while the pronoun is masculine (*-hu* as opposed to feminine *–ha*). The use of the expletive in MSA is restricted to post-*ʔinna* position, but can occur sentence-initially in other varieties of Arabic such as the closely related CA, and Egyptian Arabic. I return to these facts in more detail in Chapter 4.

ʔinna does not pose any additional restrictions on the word order of null-copular sentences. 132 and 133 show that the acceptable word orders for null-copular

sentences, discussed in section 2.1.1 examples 25 – 27, are also acceptable when introduced by *ʔinna*, and unacceptable word order without *ʔinna* remains unacceptable with the introduction of *ʔinna*.

(132) ʔinna hind-an ustaathat-un
indeed Hind-ACC professor-NOM
'Indeed Hind is a professor.'

(133) a. ʔinna fii l-maktab-i asaatithat-an
indeed in the-office-DAT professors-ACC

b. * ʔinna asaatithat-an fii l-maktab-i
indeed professors-ACC in the-office-DAT
'Indeed professors are at the office.'

ʔinna may head a clause with fronted DPs of the type discussed in section 2.1.4 without any additional word order restrictions. This fact is true for fronted DPs extracted from the object position (134), or from other positions (135).

(134) ʔinna Nadia qaabala-ha Hamza
indeed Nadia met-her Hamza
'Indeed, Nadia, Hamza met her.'

(135) ʔinna Nadia ishtara bayt-a-ha Hamza
indeed Nadia bought3MS home-ACC-POSS3FS Hamza
'Nadia Hamza bought her house.'

In 135, *Nadia* is extracted from a Construct State phrase. Note that the fronted element may not be at a higher position than *ʔinna*, as can be seen in the ungrammaticality of 136.

(136) *Nadia ʔinna ishtara bayt-a-ha Hamza
Nadia indeed bought3MS home-ACC-POSS3FS Hamza
'Nadia Hamza bought her house.'

To sum up, *ʔinna* may not be followed by a verb. It allows subject-first sentences

with an overt verb, and sentences with null copula. It only allows verb-first word orders only if *ʔinna* is separated from the verb by an adjunct AP or PP, or by an expletive pronoun. The next section shows case marking in the *ʔinna* clause under the various permissible word orders.

2.3.4. *ʔinna* and Its Sisters: Case Marking

In this section, I describe case marking in clauses introduced by *ʔinna*, and the differences between them and that of clauses introduced by a null complementizer or conditionals. This description will show that for each of the permitted word orders described in the previous section, the following case marking obtains:

1. In *ʔinna*-SV(O) word orders, S shows accusative marking.
2. In null-copular sentences (*ʔinna*-DP_{def}-DP_{indef}, *ʔinna*-DP_{def}-PP, *ʔinna*-PP-DP_{indef}), the subject DP shows accusative marking, regardless of word order.
3. In fronted-DP word orders, the fronted DP shows accusative marking, and the resumptive pronoun shows whatever case marking determined by the extraction site: nominative for the subject.
4. In *ʔinna-expl*-VS(O), the expletive shows accusative marking and the subject shows nominative marking.
5. In *ʔinna-adverbial*-VS(O), the adverbial shows accusative and subject nominative case marking.

I now move to showing each case marking in each of the possible word orders of *ʔinna* phrases described in the last section. When *ʔinna* is followed by a DP, that DP are in the **accusative** case regardless of which word order follows the DP. In 137, the DP

albanaat (girls) shows accusative case marking, while in the absence of *ʔinna*, it is nominative.

(137) ʔinna albanaat-i waSalna
indeed the girls-ACC arrived
'Indeed the girls arrived.'

This is also true for null-copular sentences. In 138, which is the *ʔinna* counterpart of 25, *hind* is in the accusative after *ʔinna* while it is nominative in the absence of *ʔinna*. Note that the effect of *ʔinna* is limited to the subject DP in null-copular sentences. The complement *ustaathat* (professor) maintains its nominative case regardless of the presence of *ʔinna*.

(138) ʔinna hind-an ustaathat-un
indeed Hind-ACC professor-NOM
'Indeed Hind is a professor.'

At least as far as null-copular sentences are concerned, the effect of *ʔinna* is structural, not linear. In sentences with indefinite subjects, like 139, where subjects do not appear clause initial, they are still in the accusative case, as can be seen through the accusative case of *asaatithatan* (professors). Accusative case marking after *ʔinna* is not determined by adjacency, but rather by structural distance from *ʔinna*.

(139) ʔinna fii l-maktab-i asaatithat-an
indeed in the-office-DAT professors-ACC
'Indeed there are professors at the office.'

When *ʔinna* is followed by an expletive, as in 140, the expletive receives accusative case, and the arguments in the rest of the sentence receive whatever case they would be assigned in the absence of *ʔinna*. Note the nominative case on the subjects and predicates in the examples, and dative after the preposition and in Construct State. They

demonstrate the same case marking behavior described in the case section.

(140) a. ʔdaaf-at ʔinna-hu hind-un saafar-at
added-3FS that.expl(ACC) Hind-NOM traveled-3FS
'She added that Hind travelled.'

b. ʔdaaf-at ʔinna-hu saafar-at hind-un
added-3FS that-expl(ACC) travelled-3FS Hind-NOM
'She added that Nadia travelled.'

c. ʔdaaf-at ʔinna-hu hind-un ɣaneyyat-un
added-3FS that-expl(Acc) Hind-NOM rich-NOM
'She added that the Nadia is rich.'

d. ʔdaaf-at ʔinna-hu hind-un fii l-hind-
added-3FS that-expl(Acc) Hind-NOM in the-India-DAT
'She added that Nadia is in India.'

e. ʔdaaf-at ʔinna-hu fii bayt-i-na rajul-un
added-3FS that-expl(Acc) in house-DAT-our man-NOM
'She added that a man is in our house.'

At first glance, it may seem redundant to note that the expletive shows accusative case marking. However, given that we have seen in the last section that the expletive is not the subject of the main verb, and in this section we have seen that accusative case marking after *ʔinna* is not an adjacency effect, the fact that the expletive shows accusative after *ʔinna* may be noteworthy.

Finally, we have seen in 129 that a VS word order is permitted after *ʔinna* if the verb is separated from *ʔinna* by an adverbial. As 129 shows, the postverbal subject *Haqiiqat* shows nominative case marking. If the adverb after *ʔinna* is followed by the subject, the subject is in the accusative, as in 141:

(141) qaala ʔinna l-yawwm-a Haqiiqat-a l-ʕayyinaat-i tattaDiH
said3MS that today-ACC truth-ACC the-samples-DAT become.clear3FS
'He said that today the truth about the samples comes out'

In 141, the adverbial[12] is followed by a SV construction, and the preverbal subject *Haqiiqat* carries the accusative marker *-a*.

2.3.5. *ʔinna* and Its Sisters: Summary

To sum up, section 2.3 describes word order and case behavior of *ʔinna* clauses. Compared to sentences headed by null complementizers or conditionals, only two of the four permissible word orders are available in *ʔinna* clauses. In terms of case, subjects of *ʔinna* clauses show accusative, as opposed to the nominative case morphology in sentences headed by conditionals or null complementizers. The ungrammaticality of VS *ʔinna*-headed clauses is relaxed if an adjunct PP, AP, or an expletive intervenes between *ʔinna* and the verb. In terms of case marking, subjects in sentences with intervening PPs or APs are in the accusative. In sentences containing an expletive pronoun after *ʔinna*, the subject is in the nominative in both preverbal and postverbal positions. The discrepancy in case marking between the expletive pronoun and APs and PPs indicates that the accusative case marking on the expletive is structurally licensed, unlike the inherent accusative of APs.

This section shows case and word order facts in *ʔinna* clauses as opposed to clauses introduced by null complementizers and conditionals. The next section shows why this data, especially the accusative case marking on subjects, is theoretically problematic, and states the research problem of the dissertation.

[12] The accusative morphology on *l-yawwm.a* (today) is independent from *ʔinna*. Non-PP adverbials in Arabic show accusative morphology as a reflection of their inherent case.

2.4. Accusative Subjects After *ʔinna*: The Research Problem

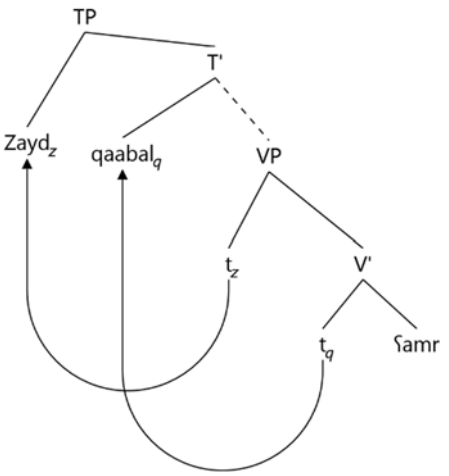
Case behavior of the accusative subjects in *ʔinna* clauses is unexpected, assuming that morphological case mirrors structural Case. In approaches that assume that T is the locus of Case licensing, by the time the complementizer is merged into the structure, the subject DP will have already received nominative, and is unavailable for further valuation. Under the assumption of this dissertation that C is the source of Case licensing through FI, it is unclear why *ʔinna* should license accusative rather than nominative subjects, or restrict complements in postverbal subjects as discussed earlier, especially since TP complements of null C and those of *ʔinna* are otherwise identical at least in SV word order.

To give a concrete example, take the sentence in 142.

(142)	ʔinna	zayd-an	qaabala	ʕamr-an
	indeed	zayd-ACC	met3MS	Amr-ACC
	'Zayd met Amr indeed.'			

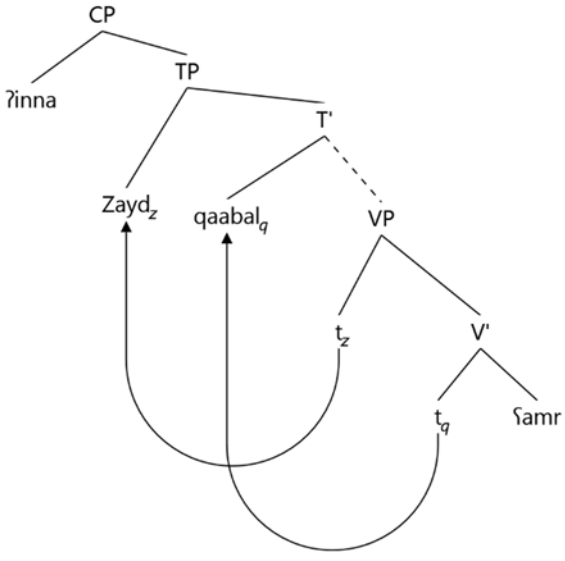
First, let us consider the sentence under older assumptions, that subject Case is valued under spec-head agreement with T. At the step of the derivation where the TP is built, the structure of the sentence is as shown in 143, ignoring functional projections between VP and T (v, AspP, …). The verb *qaabal* moves to T under head movement. The probe on T (an unvalued D feature) is valued by agreeing with the active goal *zayd*, which is visible to the probe as it has unvalued Case. *zayd* moves to spec,TP to satisfy the EPP property on T. T values the unvalued Case on *zayd* with NOM.

(143)



The activity requirement of a goal to be accessible for computation in a given derivation (Chomsky 2001:5 – 8; Chomsky 2005:19; Chomsky 2000:123; Chomsky 2008:142) effectively bans multiple case assignment. By the time the complementizer *ʔinna* is merged, the DPs in question will have already received nominative case, and are unavailable for the accusative. In the following step in the derivation (144), *ʔinna* merges into the structure.

(144)



Empirical data shows *zayd* with accusative morphology. This can only result from a

probe on C. However, *zayd* should not be visible for the probe, as it already has a valued Case feature from 143. The derivation should crash.

Current assumptions for this dissertation can explain case behavior under *ʔinna* less problematically. Under FI, subject case/Case is accounted for in terms of C rather than T. The sentence in 145 would then have a derivation as follows: when T merges with vP in 145, both the verb and the subject are available targets. Only *ʕamr* 'Amr' is in the domain of vP phase and is inaccessible under PIC. It is also inactive, as its ACC case has been valued by the light verb head. The verb moves to T under head movement.

(145) $[_{TP}$ qaabala$_q$ $[_{vP}$ zayd $t_{q\ (\sout{case})}$ ʕamr $_{Case=ACC}]]$
met Zayd Amr

In the next step of the derivation 146, merge takes place (a) as well as FI (b) and valuation. C merges to the structure, marking the higher CP phase (a). In b, FI takes place, whereby phi and Case features are transferred to T (now also filled by the verb). The subject *Zayd* is active because its Case is unvalued, and is accessible in the specifier position of the lower vP phase. Phi and Case probes, now on T, search the domain of the CP phase and locate *Zayd*. Feature valuation takes place (c) where phi features on T are valued as third person singular, Case on zayd is valued as ACC. The EPP property of T is satisfied (d) by moving *zayd* to spec,T.

(146) a. $[_{CP}$ ʔinna$_{ACC,\ phi\ features}$ $[_{TP}$ qaabala$_q$ $[_{vP}$ zayd$_{Case=}$
$t_{q\ (\sout{ACC})}$ ʕamr $_{Case=ACC}]]$

b. $[_{CP}$ ʔinna$_{\sout{ACC,\ phi\ features,\ EPP}}$ $[_{TP}$ qaabala$_{qACC,\ phi\ features,\ EPP}$ $[_{vP}$ zayd$_{Case=}$
$t_{q\ (\sout{ACC})}$ ʕamr $_{Case=ACC}]]$

c. $[_{CP}$ ʔinna$_{\sout{ACC,\ phi\ features,\ EPP}}$ $[_{TP}$ qaabala$_{\sout{ACC,}\ phi=3MS,\ EPP}$ $[_{vP}$ zayd$_{Case=ACC}$
$t_{q\ (\sout{ACC})}$ ʕamr $_{Case=ACC}]]$

d. $[_{CP}$ ʔinna$_{\sout{ACC,\ phi\ features,\ EPP}}$ $[_{TP}$ zayd$_{Case=ACC}$ qaabala$_{\sout{ACC,}\ phi=3MS,\ EPP}$ $[_{vP}$ t_{zayd}
$t_{q\ (\sout{ACC})}$ ʕamr $_{Case=ACC}]]$

Recall that all the operations described in (a – d) take place simultaneously. Under FI, the second step (146) can be represented by (d) only; I have opted to breaking down the operation in several lines for clarity of exposition. The final step is Spell-Out (147). At PF, relevant copies are pronounced or deleted, and the morphological component assigns morphemes to valued features.

(147) ʔinna zayd-an qaabala ʕamr-an
indeed Zayd-NOM met Amr-ACC
'Indeed Zayd met Amr.'

FI seems to avoid problems related to the activation principle. It still needs to show how the feature structure of *ʔinna*-type complementizers account for Case/case and word order restrictions as opposed to those of null complementizers and conditionals. Specifically, why should Case licensed by *ʔinna* be realized as accusative in preverbal subjects, but nominative in postverbal subjects? FI still needs to show how the feature structure of *ʔinna*-type complementizers account for Case/case and word order restrictions as opposed to those of null complementizers and conditionals. This question is compounded if we bear in mind that TP complements, at least in SV word order, are identical across the three types of complementizers as far as finiteness and agreement are concerned. To address this question, the rest of the dissertation examines different steps at the derivation where Case/case for subjects can be valued. I first discuss previous accounts in the literature involving case marking and *ʔinna*, whereby the grammar could allow for *zayd* in 142 to be visible to the Case probe on *ʔinna* for revaluation, in effect allowing MCA. Other accounts posit that the nominative morphology in non-*ʔinna* subjects is 'default case;' case assigned by some postsyntactic

operation in the absence of a structural Case assigner, and the probe on *ʔinna*, if present, would be able to value ACC with no problems. I will show that current complementizer-based accounts for subject Case do not quite capture Arabic data, and propose a fuller complementizer-based account.

3. REVIEW OF LITERATURE

In Chapter 2, I indicate that the accusative case of the subject in *ʔinna* clauses is problematic. In this chapter, I review relevant literature related to subject Case assignment in Arabic, case assignment in *ʔinna* (and other) clauses, and MCA. Section 3.1 outlines literature that touches on *ʔinna* subjects, mostly in terms of referring to the nominative case in Arabic as default case, as well as one of the most commonly referred to concepts of default case, that of Schütze (1997, 2001). Section 3.2 reviews literature on MCA. Finally, section 3.3 reviews literature on Case assignment via Complementizer.

Literature on the subject does not discuss the restriction on VS word orders, after *ʔinna*. This is probably because many authors are more interested in the agreement asymmetry associated with VS-SV word order variation. I will touch on SVAA in the review of literature as it is relevant in the context of case/Case and the *ʔinna* clause.

3.1. Default Case Analysis

Under DCA, the nominative case marking on the (subject) DP is not the result of any syntactic operation: it comes out of the syntax with no case marking,[13] and is

[13] Depending on the specific implementation of DCA, default case is given in the absence of morphological or abstract case. I will discuss specific implementations in their respective sections.

assigned default case (nominative) to satisfy a PF (morphology) requirement that every nominal in Arabic must carry case marking. When a syntactic Case assigner, such as *ʔinna*, is present, the DP in question gets its case (accusative) from its relation with that assigner, and there is no need for default case to be invoked. Accounts that involve *ʔinna* clauses and invoke default case can be seen in Mohammad (1988, 2000), Ouhalla (1994), and Soltan (2006). In this section, I summarize the relevant data and arguments made in these works. I will discuss in section 4.3 default case as argued for by Schütze (1997, 2001), as it is one of the best articulated accounts of DCA. The overall review of work involving DCA shows that DCA for Arabic is either assumed rather than substantiated, or is defined structurally where an 'elsewhere condition' is not the best account.

3.1.1. Mohammad (1988)

Mohammad argues that the nominative case is the default case for subjects in Arabic based on evidence that it cannot receive case under government from AGR. Working within the GB tradition, he notes (p. 225) that there are five properties attributed to pro-drop languages (Chomsky 1981; Rizzi 1982):

i. Missing subjects.

ii. Absence of expletives.[14]

iii. Apparent absence of that-trace effect.

iv. Free subject-verb inversion.

[14] This property is not true for Arabic, as we have seen the expletive pronoun *-hu* in the last section. There is also another more commonly used expletive; *hunaaka*, equivalent to the English *there*.

v. Availability of Rule R (Chomsky 1981).

Mohammad focuses his paper on items iv and v. Rule R is an optional rule that delivers the effects of affix-hopping within the GB framework. This rule lowers AGR from Infl to V, which allows AGR to govern the postverbal subject, and assigns NOM to the subject with no need for the subject to move above the verb. Non-pro-drop languages do not make use of the optional Rule R, subjects cannot receive NOM, and SV word order variation is not allowed. This rule, according to Mohammad, is based on the assumption that AGR is the nominative case assigner (at least in Arabic), and he sets out to test that claim.

All in all, Mohammad shows that there is lack of correspondence between agreement and case assignment in Arabic. He first shows that there are nominative non-agreeing subjects (Mohammad's terminology for partial agreement), then shows that there are nominative nonsubjects, and finally that there are accusative subjects. To show that nominative subjects do not have to agree with the verb, Mohammad uses data from Classical and Palestinian Arabic to demonstrate SVAA, which is discussed in 2.1.1.1 and 2.1.2. Verbs must agree with preverbal subjects in both gender and number: 148b is ungrammatical as the verb shows only gender agreement, while its counterpart 148d which shows both gender and number agreement on the verb is grammatical. Postverbal subject, on the other hand, may only show gender agreement, as can be seen in the ungrammaticality of 148c where the verb shows number agreement, and the grammaticality of 148a where the verb shows only gender agreement.

(148) a. jaaʔat l-banaat-u
came3FS the-girls-NOM
'The girls came.'

b. * l-banaat-u jaaʔat
the-girls-NOM came3FS
'The girls came.'

c. *jiʔna l-banaat-u
came3FP the-girls-NOM
'The girls came.'

d. l-banaat-u jiʔna
the-girls-NOM came3FP
'The girls came.'

He proceeds to show that there are nominative NPs (DPs) that are not governed by AGR. Using data similar to our 75 and 76, repeated here as 149 and 150, he shows that both the subject and predicate '(if the predicate can receive Case, that is)' are nominative (p. 230).

(149) al-ustaath-at-u jamiil-at-un / taʕbaan-at-un/miSriyy-at-un
the-professor beautiful / tired/Egyptian
(def-prof-FS-NOM) (beautiful /tired /Egyptian -FS-indefNOM)
'The professor is beautiful/ tired/Egyptian.'

(150) al-muhadis.uun taʕbaan.uun
the-engineers tired
(def.PM.NOM) (indef.PM.NOM)
'The engineers are tired.'

Mohammad dismisses nominative Case assignment under government by AGR by showing that there are data where exclusive Case assignment under government by AGR violates uniqueness, where there is a mismatch between the number of governors and the number of nominative NPs. According to Mohammad, 'If nominative Case can

only be assigned under government by AGR, we must, then, conclude that AGR can assign nominative Case to two positions. This will constitute an unwarranted deviation from the assumption in GB (cf. Chomsky, 1981) that one and only one Case per Case assigner, and one and only one Case per assignee' (p. 230). He further shows that the nominative on the predicate DPs are not related to AGR indirectly through some kind of percolation from the subject. In sentences like 151, the embedded subject *lwalada* (the boy) must be in the accusative case, and the predicate must be in the nominative case/Case. This means that case marking on the subject and predicate are independent of each other.

(151) a. qultu ʔinna l-walad-a mariid-un
said1S that the-boy-ACC sick-NOM
'I said that the boy is sick.'

b. *qultu ʔinna l-walad-a mariid-an
said1S that the-boy-ACC sick-ACC
'I said that the boy is sick.'

c. *qultu ʔinna l-walad-u mariid-un
said 1S that the-boy-NOM sick-NOM.
'I said that the boy is sick.'

So far, Mohammad shows that there are nominative subjects that do not agree with the verb, and that there are nominative nonsubjects. The data in 151 also show that there are subjects that are not nominative (*lwalada* in a).

Having shown that there is no relation between AGR and nominative, Mohammad attempts to identify where nominatives in Arabic come from. He looks at left-dislocated NPs, as in 152 and topicalized NPs, as in 153. In both sentences, the sentence-initial nominative NP is outside the domain of AGR, and is associated with a

resumptive pronoun that shows accusative [c]ase. In both sentences the sentence-initial NP would be ungrammatical to carry anything other than nominative (p. 234).

(152) l-walad-u qultu ʔanna-hu jaaʔa
the-boy-NOM said1S that-he ACC came3MS
'The boy, I said that he came.'

(153) l-walad-u raʔaa-hu ahmad-u
the-boy-NOM saw3MS-him ACC Ahmed-NOM
'The boy, Ahmed saw him.'

He suggests that the nominative case, then, is not assigned by AGR, but it is a default case:

> Following Mohammad (1986), I suggest that nominative Case in Arabic is a default Case, i.e. it is a Case assigned to a +N category if this category is immediately dominated by a sentential category and it is not governed by a lexical Case assigning governor. This is confirmed by the following examples where the nominative Case assigned to TOPIC positions, as in the examples discussed previously, can be overridden:
>
> (154) [his(34)]
> qultu ʔanna l-walad-a raʔaa-hu ar-rajul-u
> said 1S that the-boy-ACC saw3MS-him the-man-ACC
> 'I said that the boy, the man saw him.'
>
> (155) [his (35)]
> inna l-walad-a qultu ʔanna-hu jaaʔa
> that the-boy-ACC said1S that-he came3MS
> 'The boy, I did say that he came.'
>
> In both (34) and (35) there is a TOPIC in the accusative which would be in the nominative if it were not embedded under *ʔanna*/*ʔinna*. The ease with which the nominative Case can be overridden does indeed provide strong support to the claim that nominative Case in Arabic is a default Case.
>
> (Mohammad 1988:234–235)

3.1.1.1. Review of Mohammad (1988)

Mohammad convincingly shows that AGR is not the nominative case assigner by showing that there can be a mismatch between the number of AGR heads in a sentence

and the number of nominative DPs in that sentence. His argument is based on a number of theoretical assumptions. First, he assumes that morphological case is a strict reflection of structural case; he consistently refers to upper-case Case. He also commits to a strict one Case assigner assigning exactly one Case, and each NP will receive one and only one Case. These are standard assumptions within GB, and largely within MP - whether it is checking, assignment, or valuation, there is exactly one assigner/valuator/checker for each DP. I will discuss these assumptions in later sections that discuss DCA and MCA.

In terms of data, Mohammad's selection of data points is appropriate, and addresses the point in hand: that an AGR cannot be the nominative assignment. He states that his data are from CA. However, I think that he is using the terms CA and Standard Arabic interchangeably and the data are meant to demonstrate MSA facts. The sentences in themselves can be from MSA or CA. However, at least one of the grammaticality judgments does not apply to CA. He claims that (p. 234) fronted NPs must be in the nominative case, and nothing else (but c.f. the discussion of examples 152 and 153 above). This is, in fact, not true for CA, as can be seen in 156.[15]

(156) Wa kulla ʔinsaanin ʔalzam.naa.hu Taaʔira.hu fii ʕunuqi.hi
and each human impose.we.him fate.his in neck.his
(ACC) (GEN) (ACC) (GEN)
'And [for] every person We have imposed his fate upon his neck'
(Quran 17:13)

In this sentence, the left-dislocated DP *kulla ʔinsaanin* shows accusative case marking (the final *–a* on *kulla*), which is the same case for accusative resumptive pronoun

[15] Thanks for Ahmed Al-jallad (p.c.) for bringing the sentence to my attention.

associate –*hu*. If Mohammad's claim were true, the verse would show the fronted DP in the nominative case (*kull**u** ʔinsaanin*), contrary to fact. Mohammad's statement, however, is true for MSA. My own grammaticality judgment, as well as Bakir (1980) confirm the case distribution for nominative fronted DPs in MSA.

As far as offering an alternative explanation to the nominative case, i.e. in terms of default case, this is where Mohammad's paper falls short. First of all, he commits to a government-based account of Case, at least for accusatives. Providing two different accounts – default for nominative and government for accusative – lacks elegance. Mohammad's account of default case refers to Mohammad (1986), which is a conference presentation with no printed record of the line of argumentation thereof, so I limit my review to the statements at-hand. Mohammad defines default case structurally as 'a Case assigned to a +N category if this category is immediately dominated by a sentential category and it is not governed by a lexical Case assigning governor.' His definition is problematic in two ways. First, if he could structurally assign default case so precisely, his definition ceases to be that of a 'default' case. It can simply be restated in terms of a Case assigner plus some locality requirement. His definition amounts to something like 'nominative is assigned by a sentential head[16] (perhaps an empty C), and there is another case assigner intervening between that head and the +N category,' which is the approach of later literature in Case Theory that I adopt for this dissertation. Also, if we look at his default case as a kind of 'elsewhere condition,' it goes against his earlier argument that for each case, there has to be one and only Case

[16] He does not specify what he means by a sentential category, so I will take it to be CP.

assigner, and nominal categories must be assigned one and only one Case. His definition of default case deprives it from its 'defaultness,' and throws the ball back to MCA issues.

Under feature-based assumptions of MP, Mohammad's argument regarding NOM are partially valid. AgrP is abandoned in favor of operation Agree stemming from T. Taking Case as a feature of T, which would be the Minimalist equivalent of Mohammad's argument, his argument against Case on T would still stand. As we will see in Chapter 4, in the absence of FI (where Case comes from C, rather than T), NOM/ACC alternation cannot be accounted for through T alone. Mohammad's proposal of DCA, however, is inconsistent with the Minimalist requirement that all unvalued features (such as Case) must be valued by a higher probe, or the derivation crashes.

To sum up, Mohammad argues against NOM being assigned under government by AGR. He uses the accusative subject of the *ʔinna* clause as evidence for considering NOM a default case in Arabic, defined as dominance by a sentential category with no case assigner sister. His argument against AGR-NOM relationship is strong, but his argument for default case is not strong as it leads to contradictions within Case Theory, even the version that he assumes.

3.1.2. Mohammad (2000)

Mohammad (2000, Chapter 2) continues the same line of argumentation, but within the Minimalist Program. The aim of that chapter is to identify how different word orders are derived in MSA. It is of concern to us as it discusses interaction between case and preverbal DP positions in Arabic, and it discusses some of the word order

restrictions after *ʔinna*, and tries to explain them.

Mohammad assumes a version of the established Minimalist assumptions (Chomsky, 1986, 1995; Koopman and Sportiche, 1991; Pollock, 1989, and others). Namely he assumes the following projection hierarchy, together with the VP-internal subject hypothesis:

(157) $CP>TP>AGR_S>AGR_O>VP$[17]

Mohammad explains word order variation in Arabic as follows: the verb always moves to T. In verb-first sentences, the subject (and I assume the object) remains in-situ: in spec,VP. In verb-second sentences, the subject raises to spec,TP (attributing the variation to the availability of strong and weak T features). VOS word order is derived by moving the object to AGR_O, but the subject remains in spec,VP. OSV, OVS and SOV word orders are derived by moving the object in OSV/OVS word orders, and both the subject and object in SOV outside of the TP projection, and he suggests that they land in positions related to focus.

As far as *ʔinna* and case marking are concerned, the author assumes DCA for preverbal nominatives, and refers to Mohammad (1988) and Ouhalla (1994) as arguments for default case. He uses data about the behavior of *ʔinna* as an accusative case assigner to establish the distribution of non-nominative expletives in Arabic (p. 92). Compare sentences like 158 and 159.

(158) zaʕamtu ʔanna-*(hu) mustaHiil-un ʔan nattafiq-a
claimed.1SG that-it impossible-NOM that agree.1PL-SUBJ
'I claimed that it is impossible for us to agree'

[17] Mohammad notes (p. 82 fn. 1) that Chomsky (1995a, Chapter 4) proposes the elimination of AGR_S and AGR_O. He assumes the hierarchy in (157), however.

(159) *huwa msutaHiil-un ʔan nattafiq-a
it impossible-NOM that agree.1PL-SUBJ
'It is impossible for us to agree'

The sentence in 159 is ungrammatical (although Mohammad cites some contexts where a nominative expletive is allowed), 158 is only grammatical with an overt expletive. Mohammad uses the fact that *ʔanna* is an accusative case assigner to argue that the case marking has forced the lexically overt version of the expletive to be used. He also shows that similar case facts hold for *seem*-type verbs (equivalent to English raising verbs) such as *yabduu* (seem), which requires an unambiguously expletive pronoun as its subject. In 160, the expletive subject of the verb *yabduu* must be overt, motivated by the accusative morphology.

(160) ʔiddaʕa r-rajul.u ʔanna.*(hu) yabduu ʔanna
claimed the-man-NOM that.it seem3MS that

l-banat.i saafar.na
the-girsl-ACC departed3FP
'The man claimed that it seems that the girls departed.'

3.1.2.1. Review of Mohammad (2000)

As is the case with Mohammad (1988), the author does not motivate DCA, but rather assumes it. Default case is critical for the overall work in this book, as it combines with *ʔinna* case assignment to account for the distribution of Arabic expletives. The author argues that because *ʔinna* assigns accusative, the phonologically overt version of the expletive is forced to surface. Given Mohammad's default case assumptions, what is the case situation of the expletive in the absence of *ʔinna*? This question might shed light on what exactly the author means by 'default case' and how it is implemented.

Mohammad does not address that question directly. In the next paragraphs, I pursue some possible answers.

One possibility is that to say that nominative is a default case in the sense that it is a PF requirement and not structural. Every overt +N category must show case morphology. As the covert expletive has no PF content, it is not a context where default case is relevant. When, for whatever reason, that expletive is overt, it is the third person singular **nominative** pronoun. Mohammad gives examples of nominative expletives following Q particles, and cites Fassi Fehri (1993, p. 56) as stating that sentence-initial expletives (nominative) are possible but very 'awkward.'

Another possibility is to say that default case is defined structurally in terms of Mohammad (1988), discussed above. Under that assumption, *pro* and the empty expletive are just the nominative variant of the accusative expletive under *ʔinna*. This approach will face difficulty explaining the overt variant of the nominative expletive (Mohammad supports his null expletive hypothesis by posing that it is null with default nominative Case and overt with structural accusative). But Mohammad maintains that the overt nominative variant is 'marginal' and 'awkward' anyway. In fact, this analysis might offer an explanation for the awkwardness/marginality of the overt nominative expletive. I have discussed the weaknesses of structurally-defined default case in the previous section.

Perhaps a more serious challenge to DCA lies in how Mohammad accounts for word order variation and case/Case facts. Under DCA, fronted DPs (e.g. in topicalization) leaving a resumptive pronoun behind are expected to show nominative as default case,

but this does not always happen. Recall that in a declarative sentence containing a subject, verb, and an object, Mohammad (p. 2) notes that all six logically possible word orders are possible, but marks preverbal objects as 'marginal' (as can be seen in 15d and 15f, repeated below as 161 and 162) without a resumptive pronoun coreferring with the object.

(161) ? zayd-un ʕamr-an qaabala
Zayd-NOM Amr-ACC met3MS
'Zayd met Amr'

(Mohammad, 2000:3. his (3d))

(162) ? ʕamr-an zayd-un qaabala
Amr-ACC Zayd-NOM met3MS
'Zayd met Amr.'

(Mohammad, 2000:3. his (3f))

He does not give any examples of the corresponding sentences with resumptive pronoun, which I give in 163 and 165. The sentence in 164 corresponds to 161 with a resumptive pronoun and nominative case marking on the fronted object. 165 is much better than 162, while both 163 and 164 are much worse than 161.

(163) *zayd-un ʕamr-an qaabala-hu
Zayd-NOM Amr-ACC met3MS.him
'Zayd met Amr'

(164) *zayd-un ʕamr-un qaabala-hu
Zayd-NOM Amr-NOM met3MS.him
'Zayd met Amr'

(165) ʕamr-an zayd-un qaabala-hu
Amr-ACC Zayd-NOM met3MS-him
'Zayd met Amr.'

The contrast in 165 shows that fronted DPs keep their case marking, which would be unexpected under Mohammad's assumptions, whatever theory of resumption

he assumes. If he assumes that resumptive pronouns are traces, and that the fronted DPs move after they have checked their Case, then there is no longer need for assuming default case. If he assumes that fronted objects are base-generated and the resumptives check their Case independently of objects, then they (fronted objects) should show nominative morphology under default, contrary to fact. Let us move now to see how Mohammad actually accounts for these word orders.

The author tries to explain the derivation of SOV and VOS in terms of movement (p. 84). In SOV word order, he rejects that this word order is base-generated because base-generation will entail the introduction of empty categories in the sites where these arguments would originate under movement analysis (they would be filled with these arguments in other word orders). While the empty position for the subject may be *pro*, it is not possible to propose the same for the object because Arabic *pro* is only found in nominative contexts. The author proposes that both the subject and the object[18] move higher than TP. He notes that their landing site is not clear – it could mean adjoining T under multiple-specifier analysis, or it could be higher projections related to focus.

In the last chapter, we have seen that Mohammad differentiates between two types of A' positions: topicalization and left-dislocation. In topicalization the DP is fronted via movement, is associated with a gap, and retains its case. In left-dislocation, the DP is base-generated, is associated with a resumptive pronoun, and shows nominative case marking. This brings us to the logical question: which category do the preposed DPs fall under? This question is relevant to our discussion as the nominative

[18] The text (p. 84) says 'both the subject and the verb move' but I believe it is a misprint.

case of the left-dislocated element is presumably default case, as defined by Mohammad (1988). The author himself notes that preverbal objects are more acceptable if they are associated with a resumptive, which makes them more of a dislocated element, which means that they are base-generated. Under DCA: this base-generated DP is not within the domain of a case assigner, and should show the default (nominative) case, contrary to fact. Indeed, Mohammad rejects the base-generated DP hypothesis as stated in the previous paragraph, but does not explain the acceptability of the sentence with a resumptive as opposed to the 'marginality' with the lack of resumptive. Proposing that the fronted object lands in a different projection than a TopicP will not save Mohammad's argument. The object moves there (wherever 'there' is), and should leave a gap rather than a resumptive given Mohammad's argument, and if we claim that it is base-generated for some reason, default case should follow, rather than accusative, contrary to fact.

To sum up, Mohammad (2000) assumes DCA and uses it to support case facts related to *ʔinna* and to distinguish left-dislocation from topicalization. His analysis of left-dislocation does not show why a fronted object leaving a resumptive behind – which is not only grammatical, but even preferred to leaving a gap – does not show default case.

3.1.3. Ouhalla (1994)

Working within the GB framework, Ouhalla (1994) argues that the nominative Case is assigned through a 'default Case mechanism' which he defines as 'mechanism which applies only in the absence of a structural Case assigner' (p. 48).

Ouhalla examines the implications of the split-Infl hypothesis, and the VP-internal subject hypothesis on the derivation of Arabic word order and negation. He assumes that Case is assigned under government, and a projection hierarchy that includes T, AGR_S, AGR_O and VP-internal subject. He argues that both preverbal and postverbal subjects receive their Case under default, then extends his discussion to the subject and predicate of equative sentences, in effect arguing that all NOM is assigned via a default mechanism.

According to Ouhalla (pp. 48, 49), there are four positions where a DP has nominative Case, and he argues that in each of the four cases the nominative is assigned via a default mechanism. The first case is the postverbal subject, which, he claims, has no Case governor. Preverbal subjects, although governed by AGR_S, are not governed by a Case assigner. He uses the fact that preverbal subjects are in the accusative when they follow *ʔinna* as evidence that AGR_S does not assign Case. The absence of *ʔinna*, hence any Case assigner, results in NOM, which he takes to be evidence that NOM is default Case. The subject and predicate of equative sentences are also nominative (c.f. 166).

(166) a. Hind-un qassasat-un
Hind-NOM story.writer-NOM
'Hind is a story writer.'

b. l-mudarris-u mariid-un
the-teacher-NOM ill-NOM
'The teacher is ill.'

(Ouhalla, 1994:48, his (10))

Ouhalla argues that in both sentences, if a Case-governor is introduced, the accusative case is assigned instead of the nominative. In 167a, which contains a verb (be), the predicate is assigned accusative, and the subject is in the nominative. In 167b,

where the sentence is embedded under a complementizer (*ʔanna*), the subject is assigned accusative, and the predicate remains nominative. Ouhalla interprets this as evidence that accusative is assigned under government by a Case-governor, and nominative is an indication that such governor is absent, and is assigned under a default mechanism.

(167) a. (kaan-at) Hind-un (kaan-at) qassasat-an
was-3FS Hind-NOM was-3FS story.writer-ACC
'Hind was a story writer.'

b. ʔanna l-mudarris-a mariid-un
Comp the-teacher-ACC ill-NOM
'that the teacher is ill.'

(Ouhalla, 1994:48, his (11))

3.1.3.1. Review of Ouhalla (1994)

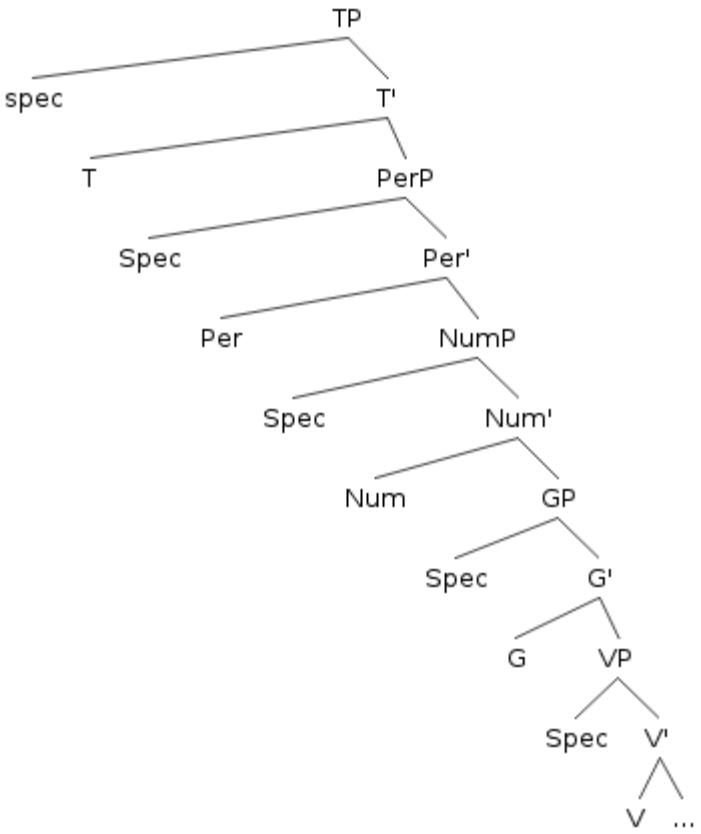
In this section, I focus on Ouhalla's argument for default nominative Case rather than his paper in general. In addition to my own view, I summarize Coopmans' (1994) argument against default case as laid out by Ouhalla. In my opinion, Ouhalla's claim deserves more consideration than the author gives to the issue, both in terms of argument and implications. Ouhalla argues that accusative is assigned by a Case-governor, but because there is no overt Case-governor, he reaches the conclusion that nominative is assigned under a default mechanism, without exhausting the possibility that there may be a nonovert Case-governor. Such possibility is not unreasonable, given the highly restricted distribution of the nominative case. The author himself restricts the distribution of the nominative case in the entire grammar of Arabic in two highly predictable positions: subject and equative sentence predicate. Furthermore, the author

does not discuss the implications of the default mechanism for assigning Case. To say the least, it makes a theory of structural Case less attractive, as it only accounts for accusative under government by AGR_O, but AGR_S cannot assign Case (nominative).

In fact Coopmans (1994) highlights these points in the larger context of Ouhalla's larger argument. If Ouhalla takes Case to be assigned under spec-head relation, together with verb movement, Coopmans says that this view of default case is '[this is] rather disappointing for those who wish to claim that structural Case can be reduced to spec-head relation generally' (p. 74). If, according to Ouhalla, nominative is assigned under default mechanism, *ʔanna* is a Case assigner that assigns accusative but not under spec-head relation, and in double-object constructions the second object is assigned accusative 'by a special mechanism different form spec-head relation.' Coopmans rightfully notes that this may lead the reader to wonder about the strength of the overall argument made by Ouhalla and whether the object truly moves to spec,AGR_O. Coopmans provides evidence in favor of the object moving to AGR_O, which I do not discuss here, nor will I discuss Ouhalla's arguments as they are not directly related to the question at hand. Coopmans, however, argues against the default case mechanism for nominative, and proposes an alternative mechanism.

Coopmans gives a twofold proposal to structurally account for nominative subjects in both preverbal and postverbal positions. First, he proposes splitting the AGR_S projection into person, number, and gender projections (c.f. 168) allowing for greater flexibility for partial agreement and agreement asymmetry.

(168)



Second, he proposes that, following Raposo (1987) that AGR governed by T assigns nominative Case. He assumes that Case can either be assigned under government or under spec-head relation. Under this account, the subject moves from spec,VP to spec,GenderP, but cannot stay there for lack of Case. It moves up to spec,NumP and receive nominative from Person under government, or keep moving up and receive nominative (from Person) by spec-head agreement. The verb moves up via head movement, picking verbal agreement features due to their affixal nature. If the subject has moved to spec,PersonP, the verb will show full agreement, and the subject will need

to further move to spec,TP.[19] If the subject has stayed in spec,NumberP, only gender agreement is activated and affixed to the verb during its head movement trip to T.

One major difference between Ouhalla's approach and Coopmans' approach is that the latter assumes Case checking rather than Case assignment. Under his view, a (subject) DP has Case features that needs to be checked. Once Case is checked at one link of the chain, the Case requirement is fulfilled. All in all, and fine-grained details aside, Coopmans argument regarding DCA shows that the default case mechanism weakens Case Theory, and lays out – to say the least – areas that need to be exhausted before default case can be acknowledged as a mechanism for assigning (nominative) case. Coopmans' account, however, brings back to surface the problem with *ʔinna*. Now that DCA is rejected, Coopmans does not really give a possible solution – and case checking is problematic with *ʔinna*: the subject DP chain already has a checked nominative case as it reaches spec,T, which fails to explain the accusative on the post-*ʔinna* subject.

Compared to current assumptions within MP, Ouhalla's account would be stated differently. Ouhalla argues that AgrS is not a sufficient requirement for subject Case assignment, but a Case assigner is also required. Like Ouhalla, MP does away with AgrP. Unlike him, though, all structural Case features (including NOM) should optimally be valued uniformly via a Case assigner. Ouhalla's account would have been more elegant had he taken this data as evidence for a phonologically null Case assigner of the same category as the accusative-assigning *ʔinna*.

[19] He does not say why, but he refers to Ouhalla's discussion.

3.1.4. Soltan (2006)

Working within the Minimalist Program, Soltan argues for SVAA in terms of interface requirements. For his account to work, he uses default agreement and default case, as will be seen in this section.

Recall that in SVAA the verb shows gender and number agreement with preverbal subjects, but if the subject is postverbal the verb agrees only in gender and shows singular number marking, as can be seen in the data from 148, repeated here as 169.

(169) a. jaaʔat l-banaat-u
came3FS the-girls-NOM
'The girls came.'

b. * l-banaat-u jaaʔat
the-girls-NOM came3FS
'The girls came.'

c. *jiʔna l-banaat-u
came3FP the-girls-NOM
'The girls came.'

d. l-banaat-u jiʔna
the-girls-NOM came3FP
'The girls came.'

Soltan introduces additional data that shows that if the postverbal subject is pronominal, the verb shows full agreement:

(170) a. (hum) qaraʔu d-dars-a
they read3MP the-lessin-ACC

b. qaraʔ-u (hum-u) d-dars-a
read3MP they-EV[20] the-lesson-ACC

[20] The author does not specify what the EV suffix stands for in the data. I take it to mean "Evocative."

c. *qaraʔa hum-u d-dars-a
read3MS they-EV the-lesson-ACC
'They read the lesson.'

(Soltan, 2006, his (17))

The sentences in 170 show that when the subject is a pronoun, it is optional: it can appear preverbally or postverbally. Unlike with full DPs, the verb shows full agreement in all cases: when the subject is preverbal, postverbal, or *pro*. Overt pronominal subjects are marked for discourse purposes – they are associated with emphasis or contrastive focus effects.

He then argues that unlike postverbal subjects, which are 'noncontroversially subjects,' preverbal subjects show semantic, syntactic, and case property typically associated with topics/clitic-left-dislocated (CLLDed) elements. Semantically, VS orders are assumed to denote the unmarked 'thetic' interpretation: it neutrally introduces an event together with the participants involved. Soltan uses this thetic interpretation to explain the ban on preverbal indefinite subjects. Recall from the description in section 2.1 that indefinites (in their quantificational interpretation) may not occur preverbally, neither in topicalization nor in left-dislocation contexts. The author then argues that 'this topic-like property of preverbal DPs in SV structures suggests that such DPs are actually base-generated in a left-peripheral position in the sentence in the same way CLLDed elements are generated.' (p. 249)

Another difference between postverbal and preverbal subjects is that wh-movement across postverbal subjects is possible (171a), but not across the preverbal subjects (171b). Soltan takes this movement effect as evidence that the preverbal

subject is base-generated, rather than being in this position via movement from the thematic domain.

(171) a. man Daraba zayd-un
who hit3MS Zayd-NOM

b. *man zayd-un Daraba
who Zayd-NOM hit3MS
'Who did Zayd hit'

(Soltan, 2006. his (23))

Soltan uses a default case analysis of the preverbal subject to further support his point that preverbal subjects are in A' position, but postverbal subjects are in A positions. He argues that postverbal subjects uniformly appear with nominative case. Preverbal subjects, on the other hand, appear with nominative case 'only in absence of an available case assigner (e.g. an overt C of the *ʔinna*-type or an [ECM] verb of the *want*-type' (p. 249). He argues that this distinction indicates two types of NOM. Nominative morphology on the postverbal subject is structural Case, and does not change. Nominative morphology on preverbal subject is not structural, but 'is actually default case typically assigned to topics in this language in the absence of any available lexical or structural Case assigner.'[21]

Having established that full agreement is always required if the subject is pronominal, regardless of its position in relation to the verb, and that preverbal DPs are base-generated, he proposes to incorporate these facts into any analysis of SVAA. He proposes that full agreement on the verb in sentences with preverbal DP is the result of

[21] He further supports his point with data about the nominative facts in equative sentences similar to Ouhalla's. To avoid repetition, I refer the reader to 3.1.3 for the argument and 3.1.3.1 for commentary.

a postverbal *pro* in the subject position. He proposes that VS and SV sentences have the following structural representations:

(172) VS: [$_{TP}$ T+[*v**+V] [$_{v*P}$ DP t_{v*} [$_{VP}$ t_{V} YP]]]

(173) SV: [$_{TP}$ DP T+[$_{v*}$+V] [$_{v*P}$ *pro* t_{v*} [$_{VP}$ t_{V} YP]]]

In both word orders, the verb moves to *v** and then to T. In VS, the subject stays in-situ. If it is pronominal, the verb shows full agreement. If it is a referential DP, the verb does not agree with the subject, but rather shows default agreement (third person singular). In SV word order, the subject position (spec,*v**P) is occupied by *pro*, which receives its reference from the left-dislocated/topic DP in the same way as the resumptive in CLLD. Because *pro* is a pronoun, the verb shows full agreement. The sentence-initial DP can receive structural Case if there is a Case assigner available (ECM or *ʔinna*), or it can show default NOM. He further explains this obligatory agreement with *pro* as an interface condition restatement of '*pro identification requirement*:' *pro* must be identified at the interface, where identification is established by a complete phi complex associated with it.

Having explained the agreement asymmetry, the author moves on to how this distinction can be implemented within syntax. He assumes an implementation of operation Agree via the probe-goal mechanism (Chomsky 2000; Chomsky 2001). An element with uninterpretable features (the *probe*) searches its (c-command) domain for another element with matching interpretable features (the *goal*). When the probe finds its goal, its uninterpretable features are valued by the matching features on the goal. Movement takes place when the probe also has an EPP feature. T may appear with

some or all of the following uninterpretable features, subject to lexical parameterization: phi, CLASS, EPP. He proposes that if gender is not part of the phi complex, it is in the CLASS feature set (CLASS is classifier features that show agreement in languages like Bantu,) and it may come with a *default* value. He defines EPP as a requirement to have a specifier (be a sister of something) (Chomsky 2004).[22]

The derivation and agreement of SV word order proceeds as follows: the T head has EPP, CLASS, and phi features. *Agree* takes place between T and *pro* in spec,*v**, valuating CLASS and phi features. As *pro* can only agree with a full set of features on T (as mandated by the identification requirement), the verb shows gender and number agreement. The sentence-initial DP fulfills the EPP requirement. Because it is left-dislocated or topic, it has default case in the absence of a structural case assigner.

VS word order is derived as follows: there is a full DP (rather than *pro*) in spec,v*P and T has only a CLASS probe. It does not contain phi features or EPP. When *Agree* takes place, CLASS is valued, showing gender agreement on the verb. The full DP, unlike *pro*, does not require full phi set for convergence, and the verb shows default number agreement morphology. The lack of EPP leaves the preverbal spec,TP unoccupied.

One of the consequences of the Agree-based analysis of SVAA is that it can explain why wh-movement is possible across postverbal subjects, but not preverbal subjects. Under this analysis, the structure involving preverbal subjects are CLLD structures, and the DP occupying spec,TP is base-generated, making spec,TP an A'

[22] The author refers to the earlier MITOPIL version (2001).

position. Wh-movement across this position is blocked under minimality. In postverbal constructions, the subject is in A position (spec,v*P), and spec,TP is empty, allowing wh-movement.

Assuming default case and base-generation for preverbal DPs explains the case facts of *ʔinna* clauses. Postverbal DPs are always nominative, while preverbal DPs are nominative 'only if there is no other case that could be assigned to them.' (p. 257). In this analysis, postverbal DPs get NOM via Agree with T ('the locus of nominative case assignment under standard assumptions'), but preverbal DPs never start within the thematic domain, and never get into the Agree relation with T. Soltan assumes that the nominative case is the default case in MSA, hence it is what shows up on those preverbal DPs in the absence of a structural Case assigner: ECM or an overt C (of the *ʔinna* type). Rejecting the base-generation account that the author promotes will raise a question about the need for movement: if the preverbal subject had been in spec,v*, and it could get its case in-situ (as evidenced by the VS word order), why would it move to spec,T? In addition, why would the structural nominative give way to the accusative after *ʔinna* and in ECM constructions? The author notes that his account avoids the movement from a case position problem, and the MCA account, which he describes as ad hoc and uneconomical.

3.1.4.1. Review of Soltan (2006)

For Soltan's account of SVAA to work, he needs to show that preverbal DPs are base-generated, and that the nominative they receive is not from the T head. I begin by addressing the base-generation issue. The author sometimes refers to the preverbal DP

as a topic, sometimes as a CLLDed DP, and in other times as spec,T (but still an A' position). It is not clear, however, which of the three he commits to. It seems that he eventually commits to left-dislocation into spec,T, as can be seen in his note that EPP is satisfied and the parameter setting for this position to be an A' position. If this is the case, his paper needs to indicate how he accounts for the differences between topics and dislocated elements, as pointed out in the review of Mohammad's work above – especially since he refers to Mohammad's work. The paper is also not specific as to how *pro* will get its reference from the base-generated subject. Soltan says that it is in the same mechanism as resumptives get their reference from base-generated antecedents at a higher position. However, there is a major difference between resumptive pronouns and *pro*: while resumptive pronouns are overt, *pro* is empty. Until the step in the derivation where the antecedent merges, *pro* is a null expletive, the same as what he argues against in Mohammad's (2000) work.

Soltan notes that an MCA analysis to the *ʔinna*-type or ECM preverbal DPs is ad-hoc and uneconomical.[23] However, his proposed alternative – default case – is also ad-hoc and uneconomical. Under his analysis, NOM can be assigned in two ways: by default or under *Agree*. It is more economical, however, that every DP with unvalued case would value its case automatically to the default value without waiting for a probe to agree with it, and no probes would find a DP-goal with unvalued case. An optional

[23] Soltan does not say why MCA is ad-hoc and uneconomical, but I agree with him. To allow MCA means that a DP, after having its case checked/valued, will remain 'active' – available for further probes. If we want to allow only 'saturated' syntactic objects (ones with no unvalued probes or active goals) to Spell-Out, then we will need to complicate the derivational system to allow for MCA.

default value would be destructive to the derivation system in that sense. One might argue that the default value is only assigned at Spell-Out where all DPs with unvalued case would get valued for the derivation to converge, but such system would clearly overgenerate. Take the sentence in 174 as an example. Under Soltan's account of DCA, *zayd* (and *ʕamr* for that matter) can potentially take nominative as default case without having to wait for the higher verb to value its Case/case and the sentence should be well-formed, contrary to fact.

(174)	*ʔuriidu	zayd-un	ʔan	yuqaabila	ʕamr-an
	want1S	Zayd-NOM	to	meet	Amr-ACC
	'I want Zayd to meet Amr.'				

This problem persists in a different face if we try to prevent overgeneration by proposing that default case valuation takes place later in the derivation and applies when structural Case assignment is exhausted. First, waiting itself is computationally inefficient: if a requirement like case can be satisfied immediately by resorting to default value, it is computationally more expensive for it to wait until later in the derivation. Second, even without a timing issue, default case is computationally cheaper than probe-goal Agree account. Default case does not involve searching a domain (be it workspace or lexical (sub)array), which would make default case the preferred morphology.

Case assignment under default can also potentially generate sentences where DPs are not licensed at all, rather than get the wrong case value, as in 175. In this sentence, *zayd* cannot receive case/Case from the infinitival *ʔan*. Soltan's approach, allowing NOM to be received by default, should allow *zayd* to have nominative, and the

sentence would Spell-Out as a grammatical structure, contrary to fact.

(175) *zayd-un ʔan yuqaabila ʕamr-an
Zayd-NOM to meet Amr-ACC
'Zayd to meet Amr.'

3.1.5. Summary of Default Case Accounts in *ʔinna* Clauses

There is consistent reference to *ʔinna* clauses in Arabic syntax literature whenever an argument is made in favor of DCA. *ʔinna* clauses, however, are used as evidence that nominative is default case in Arabic, rather than motivate the existence of default case and then use it to explain the accusative in *ʔinna* clauses.

The literature reviewed above uses default case in a couple of senses. It is defined structurally, assigned by a head, e.g. Topic, in the absence of another assigner, or it is defined by listing a number of syntactic contexts where DC may occur. It is also defined as a 'last resort' case, where it is used to save the derivation from crashing. The first sense begs the question of whether default case is 'default;' if its behavior can be defined in terms of its distribution in contexts so clearly defined as shown in this section, then it is better expressed if there is a case licenser of the same distribution can be established. The second sense (last resort) challenges the need for any case restriction: DPs can choose to acquire their default case any time Case requirements are violated. There is, however, another sense of default case, as used by Schütze (2001b): a purely morphological (PF) phenomenon that does not exempt a DP from structural Case requirements.

3.1.6. Default Case According to Schütze (2001b; 1997)

The accounts I have reviewed so far deal primarily with Arabic data and involve *ʔinna* and default case as they relate to Arabic. In this section, I look at another approach to default case, that of Schütze (1997; 2001b). It is a notion of default case that is not explicitly referred to in the literature on Arabic, nor does it make explicit reference to Arabic. It is, however, closely related to the research question at hand.

Schütze argues for a certain kind of default case: a certain morphological marker (spelled out postsyntactically) of DPs that are independently licensed in the syntax. For certain reasons, some DPs do not have their case inflection assigned in the syntax. Because they are syntactically licensed, they are spelled out and are sent to the morphology without inflection specification. Morphology, then, assign them default case. 176 summarizes what Schütze takes to be default case.

(176) The default case forms of a language are those that are used to spell out nominal expressions (e.g., DPs) that are not associated with any case feature assigned or otherwise determined by syntactic mechanisms.
(Schütze 2001b:206)

He specifically states that default case is morphological. It cannot 'save' a DP from violating the Case Filter (Chomsky 1981). Accordingly, the cases of default case that he discusses, and will be summarized shortly, are all of properly licensed DPs (from this point I will use the term 'case' to refer to morphological case, and 'licensing' to refer to syntactic case) which show morphological case that is unexpected under syntactic assignment. He further argues that the case filter is in fact not morphologically motivated; that morphological case is neither necessary nor sufficient for satisfying the

case filter.

For Schütze, a DP can be morphologically case marked from (i) a syntactic head, e.g. verbs or T heads (i.e. as a result of what we take as structural Case licensing); (ii) a semantically related constituent, e.g. a left-dislocated element matches the case of the corresponding argument, (iii) internal agreement, e.g. adjectives and nouns; or (iv) semantic case, e.g. dative for duration or ablative for instrument.[24] Finally, if none of these configurations is available in the morphology, the morphological system will still assign case to that DP under default. Schütze maintains that in all grammatically acceptable phrases, DPs are structurally licensed, including DPs showing default case. He does not explain why default case appears (e.g. by some mechanism of blocking Case-case correspondence), but rather describes contexts where default case appears rather than the otherwise expected structurally-induced morphology.

3.1.6.1. Environments for Default Case

To show that default case assignment indeed takes place, what we need is a DP that displays 'unexpected' case, then show that this case marking is because the 'expected' case marked is unavailable for whatever reason. Schütze demonstrates such instances in several cases from English. The first type is **left-dislocation**. Left-dislocated and appositive pronouns are ACC in English, even when they are subject related, as in 177 and 178. All the examples given in this section are from Schütze (2001b).

(177) Me/*I, I like beans. Schütze (2001b, his (4a))

[24] Schütze, as well as this section, does not deal with semantic case.

(178) The best athlete, her/*she, should win. Schütze (2001b, his (4b))

The second type is in **ellipsis**. Pronouns in elliptical constructions that do not contain an overt verb or I head are in ACC, as can be seen in 179.

(179) Q: Who wants to try this game?
A: Me/*I. Not us/*we. I/*Me do (too).
Schütze (2001b, his (7))

Certain types of **gapping** force a subject pronoun to be ACC, that is when the verb or Infl are gapped, as in 180.

(180) We can't eat caviar and him/*he (eat) beans.
Siegel (1987) in Schütze (2001b, his (11a))

Coordinated DPs are ACC, even when they are subjects, as in 181:

(181) Us and them/*We and they are gonna rumble tonight.
Schütze (2001b, his (14a))

Finally, **modified pronouns** appear in ACC, as in 182:

(182) The real me/*I is finally emerging. Schütze (2001b, his (15a))

The author discusses briefly how default case is assigned to a given DP, indicating that either an 'elsewhere condition' will apply, whereby default case is the case of choice once other alternatives are irrelevant, or 'feature filling' will supplement any (case) features that are left unvalued (probably to satisfy phonological requirements, my opinion). He then proceeds to show that such environments are available cross-linguistically, using data from German, Norwegian, Danish, among others.

3.1.6.2. ʔinna and Default Case

Putting aside whether NOM on the subject of SV or null-copular sentences is indeed default case, this section will focus instead on where *ʔinna* fits in the system

outlined by Schütze. Under his analysis, there are three types of heads: heads that license DPs only in the syntax, others that do not license a DP in syntax, but will assign morphological case, and heads that do both.[25] A significant question here would be whether *ʔinna* is of the second type (only assigns ACC in the morphology), or of the third (also licenses the DP in syntax). This question is significant because if *ʔinna* is of the third type, the question at hand is not simply whether NOM is a default case given by a morphological component, but a genuinely syntactic question. In this section, I will show that *ʔinna* licenses DP in the syntax, in addition to assigning morphological case. I will then explain why this is a problem for default case analysis of NOM.

In a sentence like 183, under DCA, *l-ʔawlaad* is licensed in the syntax. In the absence of *ʔinna*, its left-dislocation/topicalization position (per Soltan (2006)) does not have a morphological case assigning head (as in the left-dislocation case in Schütze (2001)), and would receive NOM as default case. When *ʔinna* is merged into the structure, there is a Case assigning head (*ʔinna*), which eliminates the need for default case mechanism, and *l-ʔawlaad* shows up as ACC in PF. Note that this entails that *ʔinna* does **not** structurally license a DP, and its role is purely morphological. The DP that presumably receives accusative morphology from *ʔinna* is already licensed (and can show nominative morphology in the absence of *ʔinna*). If *ʔinna* is a structural licenser in addition to its role as a morphological case assigner, *l-ʔawlaad* will be in violation of the one-to-one correspondence between DPs and Case licensers in the syntax.

[25] Schütze (2001:209 fn.4) maintains that this third type of heads does not assign Case in syntax, and that these are two separate properties of the head, one syntactic and the other morphological.

(183) ʔinna l-ʔawlaad-a qaraʔ-uu d-dars-a
Indeed the-boys-ACC read-3MP the-lesson-ACC
'Indeed he boys read the lesson.'

In the following paragraphs, I show that neither assumptions is true. Preverbal subjects are not left-dislocated, and *ʔinna* is a structural, not only morphological, Case licenser.

One of the contexts of default case according to Schütze are left-dislocated elements, which could be argued to be the case with preverbal subjects. But in a sentence like (184), *l-ʔawlaad* does not seem to be in a left-dislocated position in that sense. For one thing, left-dislocated DPs are spelled out in a separate intonational phrase, signaled in writing by a comma, as can be seen in 177. In 184, however, separating *l-ʔawlaad* in a separate intonational phrase will render the sentence ungrammatical.

(184) ʔal-ʔawlaad-u (*,) qaraʔ-uu d-dars-a
the-boys-NOM read-3MP the-lesson-ACC
'The boys read the lesson'

In fact, the left-dislocation position seems to be higher than *ʔinna*, as can be seen in 185. In this case, an intonational phrase boundary is obligatory.

(185) almuhandisuun *(,) ʔinna-hum yaksabuuna jawaaʔiza kathiiratan.
engineers , COMP-they win.3MP prizes many
(NOM) (ACC) (ACC) (ACC)
'Engineers, they win many prizes.'

ʔinna interaction with expletives provides evidence against considering it a morphological (non-syntactic) case assigner. If *ʔinna* were a morphological case assigner only, and not a DP licenser in the syntax, we would expect it to be unable to license an

expletive. If it did, this would mean that it has structural Case that must be discharged. This would also mean that the accusative nonexpletive in 183, for example, must be licensed by *ʔinna*. However, data shows that *ʔinna* does indeed license an expletive, weakening the claim for a morphology-only default case. *ʔinna* may be followed by an expletive in the accusative case (the clitic *–hu*; third person masculine singular). There are no restrictions on the phrase following *ʔinnahu*, as can be seen in 186.

(186) a. ʔdaaf-at ʔinna-hu l-ʕaaʔilat-u saafarat
added-3FS that-expl the-family-NOM travelled3FS
'She added that the family travelled.'

b. ʔdaaf-at ʔinna-hu saafar-at l-ʕaaʔilat-u
added-3FS that-expl travelled-3FS the-family-NOM
'She added that the family travelled.'

c. ʔdaaf-at ʔinna-hu l-ʕaaʔilat.u Ganeyyat-un
added-3FS that-expl the-family-NOM rich-NOM
'She added that the family is rich.'

d. ʔdaaf-at ʔinna-hu l-ʕaaʔilat-u fii l-hind-i
added-3FS that-expl the-family-NOM in the-India-DAT
'She added that the family is in India.'

e. ʔdaaf-at ʔinna-hu fii bayt-i-na rajul-un
added-3FS that-expl in house-DAT.our man-NOM
'She added that a man is in our house.'

186a-e show that *ʔinnahu* allows preverbal subjects, postverbal subjects, equative sentences, PP predicates, and nonfronted subjects, respectively. The absence of the expletive does not affect the grammaticality of all the sentences in 186, except for b, where the omission of the expletive would render the sentence ungrammatical. 186 indicates that *ʔinna* does not only assign morphological case, but also plays a licensing role in syntax. Whatever licenses the expletive cannot be what

licenses the subject (as the subject is still present in the sentence). I return to the licensing of expletive pronouns after *ʔinna* in section 5.1.3.

3.2. Multiple Case Assignment

In the previous section, I outlined relevant literature that discusses *ʔinna* subjects in terms of DCA, and argued that the DCA is problematic under any interpretation proposed in the literature. In this section, I review, and argue against, a second alternative: Multiple Case. It might be the case that subjects do indeed receive NOM from T, but then they remain active and available for further Case valuation. When *ʔinna* merges at a later step in the derivation, its Case is revalued as ACC. At Spell-Out, the most recent Case value is what survives to PF, and we see accusative morphology.

This proposal in effect dispenses with the Activity Condition on goals (Chomsky 2004:115; Chomsky 2000:123). As soon as a goal's uninterpretable features (such as Case) are valued, the goal is 'frozen in place;' it is unable to enter further operations, or be visible for higher probes other than the one who rendered it inactive. Violating the Activity Condition can overgenerate by falsely predicting the well-formedness of a sentence like 187.

(187) *John$_j$ loves t$_j$

In this sentence, *John* merges as the object of the verb *love*, and its accusative Case is valued. In the absence of the Activity Condition, it is available for further operations, allowing it to move to spec,V, and eventually all the way to the sentential subject position, resulting in the ungrammatical sentence in 187.

The Activity Condition is concerned with uninterpretable features in general, but

I will constrain my discussion of Case. The ungrammaticality of 187 may be explainable in other ways (e.g. as a violation of the theta criterion). Nevins (2004) argues against the Activity Condition by showing that 'all the derivational options ruled out by the Activity Condition can be ruled out by independent principles of locality and a constraint against multiple Case valuation.' Put differently, for a theory of derivation to account only for valid derivations, it needs either to ban MCA implicitly through a device like the Activity Condition, or explicitly via a device like Nevins' Single Case Constraint: 'A DP that is valued with more than one case feature is illegible to PF' (Nevins 2004:9).

The Activity Condition (or Nevins' Single Case Constraint as its flip-side of the coin) may be weakened if we can find languages that show evidence that a DP has been through more than one Case position throughout the derivation. Indeed, data from Hungarian, Niuean, and Norwegian (Bejar and Massam 1999) suggest that a chain may have more than one Case position, they also cite data from Icelandic where passivized DPs maintain their inherent quirky case, on the expense of the nominative of their structural Case position. Morphological evidence from Korean seems to suggest that case morphemes can be 'stacked' suggesting that a DP has received more than one case/Case. In the coming two subsections (3.2.1 and 3.2.2), I discuss this data in more detail.

3.2.1. Multiple Structural Case

Bejar and Massam (1999) point out that the Activity Condition is challenged by raising constructions in Hungarian, Niuean, and Norwegian. In 188, from Hungarian, the wh-word *kiket* originates as the subject of the embedded clause, where it receives

NOM. It also receives ACC from the ECM[26] verb en route to its final A-bar position. In its landing site, it shows accusative morphology.

(188) kiket$_i$ mondtad hogy szeretnél ha eljönnének
who-ACC you-said that you-would-like if came(3p)
'Who did you say that you would like it if they came.'
Hungarian (from Kiss (1985) in Bejar & Massam(1999, p. 66, their (2)))

Similarly, 189 shows that *na tama* originates in absolutive Case position (a), but when it raises to a higher position (b), it receives middle Case.

(189) a. Manako a ia ke momohe [e na tama]
want ABS he SUBJ sleep ABS pair child
'He wants the two children to sleep.'

b. Manako a ia [ke he na tama]i ke momohe ti
want ABS he MIDDLE pair child SUBJ sleep
'He wants the two children to sleep.'
Niuean(from Seiter (1980) in Bejar & Massam (1999:67), their (3))

Bejar and Massam note that this data is problematic in the Minimalist Program (Chomsky 1995a) late insertion model. For a DP to occupy two Case positions, it needs to be selected from Lex with two Case features to be checked by the two relevant heads. Even if this is possible, at the time when the DP with two checked Case features is shipped to PF, the morphological component will have no way of telling which abstract Case should be interpreted in the morphology. They suggest a combination of Case checking and assignment. A functional head will check Case by being in an appropriate configuration with a DP. Case on DP is assigned, e.g. as nominative at the foot of the chain in 188. If the DP raises, as it becomes in the appropriate configuration

[26] Bejar and Massam do not explain why the lower clause is a case of ECM if the verb take an entire CP complement introduced by a complementizer *ha*.

with another functional head, that head checks its Case, and assigns new Case to the DP (accusative in the intermediate chain link in our Hungarian example). Now that a chain has more than one Case at different links, the authors propose that at PF Case is interpreted 'compositionally' at PF: it is only interpreted when it is in appropriate configuration to the relevant head. In the Hungarian example, it is the head of the A-chain. They assume that wh-words have access to the Case information at the head of the A-chain. This proposal accounts for the Hungarian and Niuean data. To account for disallowing MCC in English, they propose that Case checking + assignment is parameterized: in English, once Case is assigned on a DP, it cannot be reassigned. Put in more recent terms, Bejar and Massam's proposal is that of valuation and revaluation of the Case feature, together with a parameterization of the Activity Condition. However, the authors themselves acknowledge that there are alternative analyses for all their data that do not involve Multiple Case.

Indeed, Jánosi and colleagues (2014) provide experimental evidence for an analysis of long A' dependency that does not involve MCA. They claim that data involving case mismatch similar to that used by Bejar and Massam (1999) is derived by native speakers of Hungarian through both base-generation and movement. Jánosi et al. use a version of long-distance movement that does not involve an intermediate Case position, and does away with MCA (den Dikken 2012). They conduct an experiment which consists of a questionnaire containing 91 test items and 32 fillers. Subjects were asked to judge each sentence on a scale of 1 (unacceptable) to 5 (perfectly acceptable). Subjects are 83 native speakers of Hungarian mostly at the age group 19 – 25 who

permanently live in North-Eastern Hungary. The questionnaire included sentences with long split focalization (the long-distance A' dependency which I claim is similar to Bejar and Massam's (1999) MCA data, where the NP part of a DP is focalized, while the functional part of the DP is left stranded) derived by movement, and others derived by base-generation. Each type of derivation can be diagnosed through case assignment and definiteness agreement in the matrix clause. All speakers accepted sentences with base-generation, and a subgroup of speakers (32 informants) accept the movement derivation.

Jánosi and colleagues argue that long A'-dependencies, as exemplified by long split focalization, can be derived through both movement and base-generation (resumption). First, they show that long split focalization (LSF) has the same syntactic properties as long wh-movement, and can be considered the same syntactic operation: they show similar behavior regarding verb-preverb inversion, banning a matrix expletive, and requiring a complementizer *hogy* in the subordinate clause. Empirical data from their experiment show that all speakers derive LSF via base-generation. So, in a sentence like 188, repeated as 190[27] there is a resumptive *pro* acting as the subject of the verb *eljönnének* 'come', and checking the nominative Case.

(190) kiket$_i$ mondtad hogy szeretnél ha eljönnének
who-ACC you.said that you.would.like if came(3P)
'Who did you say that you would like it if they came.'
Hungarian (from Kiss (1985) in Bejar & Massam (1999:66), their (2)))

[27] Jánosi et al. use data from LSF, but as they clearly argue that LSF is similar to long wh-movement, it is safe to exemplify their analysis on the Bejar and Massam data, especially that the analysis they use is originally an application of Den Dikken's (2012) of long-distance wh-movement.

The wh-word *kiket* 'who' is base-generated in the object position of *szeretnél* 'like,' where it receives accusative. No multiple case analysis is invoked. They further note that a subgroup of the experiment subjects accept a movement analysis, but the wh-word would then carry nominative case (rather than accusative in Bejar and Massam's example) and seems to have moved out of the nominative positon as subjects of *eljönnének* 'come'. Even then, the movement analysis that Jánosi et al. use does not involve MCC and is based on Den Dikken (2012) who uses case facts (that the fronted element shows nominative, not accusative case marking), and definiteness agreement (that the matrix verb always shows definite agreement) to argue that the wh-word does not land in an intermediate position: the matrix verb agrees with (and presumably discharges Case to) the entire lower CP. The moved element (wh-word in 190) moves directly to spec,CP. Again, *kiket* 'who' checks Case only once.

This alternative analysis is not without drawbacks. The base-generated analysis involves stipulating a null resumptive, which is empty at both interfaces. As Soltan (2006) notes, an empty element at both LF and PF is not consistent with Minimalist principles. The long-distance movement analysis as proposed by Jánosi et al. violates PIC; as *kiket* 'who' moves from the specifier of the lower TP, it crosses the embedded CP without passing through that lower CP phase edge.

3.2.2. Multiple Morphological Case

In the previous section we have seen examples of what can be perceived as multiple Case licensing, and have seen that there are alternative analyses that do not presume MCA. The second type of possible evidence against the Activity Condition may

be found in cases where there is morphological evidence that a DP carries more than one case morpheme. This can be evidence that that a DP has been a goal for more than one Case probe. Indeed, Korean 'case stacking' has been discussed as one such case, but turns out to be a case of case+focus morphology, rather than MCA.

In sentences like 191, 191a shows that the subject *nayka* carries nominative case, the sentence in 191b shows that it may also carry dative. The sentence in 191c shows that it may carry both cases.

(191) a. Nay-ka paym-i mwusepta
I-NOM snake-NOM fearful

b. Na-eykey paym-i mwusepta
I-DAT snake-NOM fearful

c. Na-eykey-ka paym-i mwusepta
I-DAT-NOM snake-NOM fearful
'I am afraid of snakes.'

(Yoon 1996:110)

The data in c has often been used to show that the subject DP carrying multiple case morphemes is evidence that it enters into multiple Case Checking relations that manifest each of the case morphemes (Gerdts & Youn, 1988; Schütze, 1997, 2001a and references there; Yoon, 1996).

However, Schütze (2001a:198 – 202; 1997) argues convincingly that the perceived case staking is stacking of (oblique) case marker with a focus marker that is homophonous with the nominative case maker *–ka*. He lists six ways in which the distribution of focus-*ka* is different form case-*ka* (my terminology). First, in focus-*ka* (191)c), the subject must be in a separate Intonational Phrase, but not in nominative *–ka* (191)a). Second, focus *–ka* is unrestrictedly optional, while dropping nominative *–ka*

is highly restricted. The two morphemes affect the distribution of subject honorification differently; nominative, but not dative, subjects must trigger honorific agreement on the predicate. Stacked *–ka* does not trigger honorific agreement on the verb, which indicates that it is of a different nature from nominative *–ka*. Stacked *–ka* may occur on locative, directional, and temporal adjuncts, where nominative cannot be licensed. Fifth, stacked *–ka* can attach to nominative subjects. With no reason for two nominative markers, it is reasonable to assume that one of the two markers is not a case marker. Finally, the two morphemes act differently with regards to floating quantifiers. Nominative, but not stacked, *–ka* on the head noun licenses nominative on an associated floating quantifier.

3.3. (NOM) Case Is the Realization of Another Feature

So far, I have discussed two main approaches that could provide an explanation to the accusative subjects after *ʔinna*: DCA and MCA. I have shown that there are serious theoretical drawbacks to both approaches, and that empirical data discussed in the literature are also accounted for in ways that do not resort to DCA or MCC, hence avoiding the theoretical downfalls of such analyses.

There is a third direction where an explanation of our problem could be found. In this section, I review approaches where the case on Arabic subjects is not valued by phi features on T (Chomsky 1995a; Chomsky 2000; Chomsky 2001), but through some other feature. Section 3.3.1 reviews Leung's (2011) account that Case is a [mood] feature in Arabic, and section 3.3.2 reviews Pesetsky and Torrego's (2001; 2004) account for Case as an uninterpretable T feature on D.

3.3.1. Mood Features as a Case Licenser

Leung (2011) argues that Case licensing in Arabic takes place via the [mood] features of the C head, rather than T. He starts by noting that the selection of the complementizer determines the choice of the mood in the subordinate clause. For example, in 192 *ʔanna* only selects clauses in the indicative mood, and in 193 *ʔan* only selects clauses in the subjunctive mood.

(192) aʕarif-u ʔanna xaalid-un yu.saafir-u/*a
know-1S that Khaled-NOM 3MS.travel-IND/*SUBJ
'I know that Khaled travels.'

(193) ʔaraad.a xaalid-un ʔan yu.saafir-a/*u
wanted.3MS Khaled-NOM that/to 3MS.travel-SUBJ/*IND
'Khaled wanted to travel.'

This generalization can be formalized as a [mood] probe on C, which establishes an Agree relation with the T head in its domain. The author uses C-agreement (the fact that complementizers agree in number and gender with the subject in languages like Greek and West Flemish), coupled with *Agreement-and-valuation* process[28] and Phase Theory, to claim that 'C-T agreement values the mood and tense features of the embedded T.' (p. 137). So, taking C-T feature inheritance in Phase Theory to be implemented via *Agree*, he proposes the following mechanism for feature valuation in a derivation:

[28] Author's italicization, I take this to mean that, in terms of Case, he is committing to valuation rather assignment or checking.

(194)

Stage One:

[$_{TP}$ DP	T_1	[$_{VP}$	[$_{CP}$ C	[$_{TP}$ DP T_2	[$_{vP}$ [$_{VP}$ V]
	[~~α mood~~]		[ω mood]	[0 mood]	
[~~β phi~~]	[~~β phi~~]		[0 phi]	[*x* phi] [0 phi]	
	[γ tns]		[0 tns]	[ψ tns]	

Stage Two:

[$_{TP}$ DP	T_1	[$_{VP}$	[$_{CP}$ C	[$_{TP}$ DP T_2	[$_{vP}$ [$_{VP}$ V]
	[~~α mood~~]		[ω mood]	[0 mood]	
[~~β phi~~]	[~~β phi~~]		[*x* phi]	[*x* phi] [0 phi]	
	[γ tns]		[0 tns]	[ψ tns]	

Stage Three:

[$_{TP}$ DP	T_1	[$_{VP}$	[$_{CP}$ C	[$_{TP}$ DP T_2	[$_{vP}$ [$_{VP}$ V]
	[~~α mood~~]		[ω mood]	[0 mood]	
[~~β phi~~]	[~~β phi~~]		[*x* phi]	[*x* phi] [*x* phi]	
	[γ tns]		[ψ tns]	[ψ tns]	

(Leung 2011:137, his (21))

In the first stage, the embedded C has interpretable (and valued) [mood] features, determined by the selecting matrix verb, and unvalued phi and tense features. The tense head has valued tense, and unvalued mood and phi features. The (subject) DP in spec,TP has valued phi features. In the second stage, C probes for phi features, and values its phi features from DP. In stage three, the [tense] feature on C allows the C head to probe to T, and values the unvalued tense on C. When C-T agreement takes place, the phi features on T are valued via agreement/inheritance. Given this machinery, Leung accounts for Case assignment as follows:

(195) a. The complementizer assigns structural case to the subcategorized subject.
b. Structural case assignment involves feature inheritance, shown by the complementizer agreement with the grammatical mood.
c. The mood feature under the complementizer assigns structural case.
(Leung 2011:139, his (23))

So, instead of considering Case its own feature, Leung proposes that Case is

assigned via the [mood] feature, and supports his claim by syntactic and morphological observations. His first observation is the accusative case assigned to the subject of *ʔinna* and its sisters. He claims that the choice of the complementizer in embedded CPs is associated with the mood, and it is responsible for the case assignment of the subject DP. More specifically, embedded clauses introduced by *ʔinna* are in the indicative mood, and assign accusative, while embedded clauses embedded by *ʔan* are in the subjunctive mood and assign nominative. Morphologically, the subjunctive morpheme on the verb looks like the accusative morpheme on the noun (the suffix *–a* (singular) ,*–ayn* (dual)), and the indicative morpheme on the verb (*-u* (singular), *-uu(n)* dual).

3.3.1.1. Review of Leung (2011)

Leung's proposal that Case is a reflect of another feature of a head other than T has been claimed elsewhere within the theory of grammar. For example, it is taken to be a reflect of phi features (Chomsky 2007b; Chomsky 2008, among others). However, Leung's proposal for embedded clauses does not stand for matrix clauses, suggesting that while the general approach may be acceptable, the specific feature in question [mood] may be a poor choice. Consider the following sentences:

(196) a. l-ʔard-u kurawiyyat-un
the-earth-NOM spherical-NOM
'The earth is spherical'

b. ʔinna l-ʔard-a kurawiyyat-un
indeed the-earth-ACC spherical-NOM
'Indeed the earth is spherical'

The sentences in 196a and 196b have the same mood. The sentence in a with the nominative subject, which Leung associates with subjunctive mood, does not seem

to have any irrealis interpretation that is usually associated with the subjunctive. Indeed, the sentences in 197 shows such lack of difference in mood syntactically.

(197) a. zayd-un yuHib-u salma
Zayd-NOM love-IND Salma
'Zayd Loves Salma'

b. ʔinna zayd-an yuHib-u salma
indeed Zayd-ACC love-IND Salma
'Zayd Loves Salma'

In both sentences a and b the verb is in the indicative mood, which indicates that the introduction of the complementizer does not affect mood. The complementizer does, however, affect case marking. Which suggests that while the observation that the introduction of the complementizers in question is related to Case, it is not the mood features that is the culprit.

As for the morphological correspondence that Leung notes, it is actually in the reverse order. According to Leung, nominative case marking is associated with subjunctive mood, but the subjunctive morphology on verb in fact resembles accusative morphology on nouns (*-a* suffix), not nominative (*-u* suffix). The same is true for indicative: Leung notes that indicative verb morphology looks like nominative noun morphology, which is indeed true, but his proposal associates indicative with accusative, which does not look like it morphologically. All in all, Leung's insights about the relation between complementizers and Case are valid: variation in case marking of the subject correlates with the choice of complementizer. His demarcation of the specific feature of C that is associated with Case, however, is not supported by empirical data.

3.3.2. Case as a T Feature (Pesetsky and Torrego 2001; Pesetsky and Torrego 2004)

In the previous section, I reviewed an argument that Case in Arabic is a [mood] feature on C. In this section, I describe some of the arguments made by Pesetsky and Torrego that Case in English is an uninterpretable T feature (*u*T) on D, for nominative (Pesetsky and Torrego 2001) and accusative (Pesetsky and Torrego 2004).

Pesetsky and Torrego argue that an explanation of Case as *u*T on D provides a better theory of language where all features have semantic value (interpretable) on some lexical item in the derivation. The account of nominative as *u*T on D readily explains a number of asymmetries. For example, in 198, nominative wh- movement blocks T-C movement (b, c), while accusative wh-movement does not (a).

(198) a. What did Mary read?
b. Who read the book?
c. *Who did read the book?

Pesetsky and Torrego explain the asymmetry in terms of 199, which shows the underlying structure of 198a, b before the movement of the wh-element. In 199a, the wh-probe selects *what*. The *u*T probe on C is equally close to spec,TP and to the T head. T-to-C movement then takes place as a result of agreement between T and C.

(199) a. [C, uT, uWh] [TP [Mary, uT] T [VP bought what]]
b. [C, uT, uWh] [TP [who, uT] T [VP bought the book]]
(Pesetsky and Torrego (2001:63), their (14))

199b, which accounts for the impossibility of T-to-C movement with subject wh-movement, resulting in the grammaticality of 198b and ungrammaticality of 198c. The closest goal to satisfy the *u*-wh probe is in the subject position. As for the *u*T probe, it can be valued by the T head, or by the (now valued and marked for deletion, but not yet

deleted) *u*T Case feature on the subject. The latter blocks the former for economy reasons: moving the subject will value both *u*T and *u*Wh features, while matching the T head only will require another search for the *u*Wh goal.

Pesetsky and Torrego (2001) argue that C heads are always empty, and *that* is, in fact, a T head moved to C via head movement. This proposal can explain the optionality of *that* in embedded clauses. In a sentence like 200, the embedded C has *u*T that is valued by the T head (*that*) moving to C. If *that* is not present, the nominative *u*T on the embedded subject can do the job.

(200) Sue said (that) John loves Mary.

As for accusative, Pesetsky and Torrego (2004) propose that it is also an *u*T on D. CPs, but not DPs, may occur as objects in APs, as can be seen by contrasting 201a and 201b.

(201) a. Sue is afraid that the Yankees may win.
b. *Sue is afraid the dark.
c. Sue is afraid of the dark.

They explain this variation by the fact that CPs are self-sufficient when it comes to interpretable T features. CPs take TP complements where they delete their *u*T feature. DPs, on the other hand, are dependent on some other category to delete their *u*T feature. Pesetsky and Torrego propose that this category is a second T head between v and V. Using telic verbs as a point of departure, they suggest that the semantic content of that second T head is relating the time of v subevent (beginning) and V subevent (target), and extend this claim to all stative verbs. Based on the behavior DP complements of VP and AP (e.g. 201c), they propose that PP objects to APs

(and other phrases) are a species of TP.

There are some similarities between Arabic *ʔanna* and Pesetsky and Torrego's analysis of English *that*, which makes it tempting to consider *ʔanna* a T head that moves to C. *ʔanna* bears the same relation to the infinitival marker *ʔan* as English *that* to infinitival *to*. *ʔanna* introduces only finite complements (203), while *ʔan* only introduces nonfinite complements (202), similar to the distribution of *that* and *to*. This is true of all word orders.

(202) ʔuriidu zayd-an ʔan/*ʔanna yzauur-a ʕamr-an
want1S Zayd-ACC to/*that visit3MS-SUBJ Amr-ACC
'I want Zayd to visit Amr.'

(203) ʔaDunnu ʔanna/*ʔan zayd-an yzauur ʔumm-a-hu
think1S that/*to Zayd-ACC visit3M mother-ACC-his
'I want Zayd to visit his mother.'

However, when it comes to Case, ʔanna-ʔan behave differently from *that-to*. First, infinitival *ʔan* may be followed by a complement with an overt nominative subject, as can be seen in 204 and 205.[29]

(204) ʔan yzauur-a zayd-un ʕamr-an ʔasʕadani
to visit3MS.SUBJ Zayd-NOM Amr-ACC made.me.happy
'Zayd visiting Amr made me happy.'

(205) ʔrad.tu ʔan yzauur-a zayd-un ʕamr-an
wanted1S to visit3MS-SUBJ Zayd-NOM Amr-ACC
'I wanted Zayd to visit Amr.'

Furthermore, if the ʔinna family were T heads, they would be expected to license nominative, not accusative, subjects, given that they appear with finite T heads. For

[29] This cannot be an indication that the tense here is finite, as the sentences would be ungrammatical if *ʔan* is followed by past or future verbs.

accusative, Pesetsky and Torrego (2004) argue that in English accusative is the realization of another (lower) T head under v (T_O), and argue that this lower T head encodes aspectual properties. It is not clear, however, that *ʔinna* or any of its sisters induce aspectual meaning variation when compared with null complementizers.

3.4. Summary

This chapter reviews literature related to case/Case in the *ʔinna* clause. I have shown that accounts that rely on DCA are insufficient. Analyzing non-*ʔinna* nominative subjects as a last-resort, or structurally defined in specific contexts leads to defining different case markers through different mechanisms. Some of the accounts that allow assigning case by default can overgenerate, where a theta-licensed DP can be allowed to Spell-Out without structurally valuating their Case features, and survive to PF with default case morphology, contrary to fact.

Accounts that explain accusatives on *ʔinna* subjects via MCA could explain accusative subjects after *ʔinna* by positing that the nominative case of the subject is rewritten as accusative when *ʔinna* merges to the structure. These accounts are incompatible with the Activity Condition for Case licensing. Empirically, data that is perceived to have multiple case morphology is shown to have focus morphology that is homophonous with case morphology. There is evidence in data where a DP seems to have moved through multiple Case positions that such DPs have reached their final landing site via long-distance movement, and the intermediate Case positions are base-generated.

The most promising approach is associating C-heads (or features thereof) with

case variation in case marking on the subject. Approaching *ʔinna*-type complementizers as T heads that move to C does not explain accusative case, rather than nominative, as it is not possible to establish the presence of an additional (aspectual) meaning of these complementizers. Another approach is to show that the nominative/accusative variation on subjects depends on the [mood] feature of the complementizer. Although there is some resemblance between mood morphology on verbs and case morphology on nouns, the mood of the verb does not affect the case morphology.

It remains true that the correlation between the case of the preverbal subject and choice of complementizers is extremely robust. In the next chapter, I show that this correlation is sufficient to explain case variation, as we establish null complementizers and conditionals license nominative, while *ʔinna*-type complementizers license accusative due to their verbal nature.

4. VERBAL COMPLEMENTIZERS

4.1. Introduction

We have seen that the correlation between the selection of complementizer is strongly, though not perfectly, associated with the nominative-accusative case morphology on subjects in Arabic. We have also seen that literature dealing with Case as a reflect of a feature in C comes closest to accounting for the Arabic data that this dissertation is set to explain. I explain case and word order variation in terms of a [verbal] feature on *ʔinna*-type complementizers that, subject to certain locality conditions, values the subject in their clauses as ACC. This claim is not entirely alien; English has a similar complementizer – *for* – which is responsible for accusative case marking to the subject of its clause.

I support my claim on two stages. In this chapter, I motivate the feature [verbal] of *ʔinna* and its sisters by establishing the similarities between the *ʔinna* family and verbs. In the next chapter, I explain the effects of the *ʔinna* family through their nature as Verbal Complementizers (VCs). This chapter is organized as follows: section 4.2 shows morphological properties that verbs share with *ʔinna* and its sisters, but not with other complementizers, section 4.3 shows semantic/pragmatic properties that illocutionary verbs share with *ʔinna*-type complementizers, but not with other complementizers, section 4.4 compares Verbal Complementizers in Arabic and the English Prepositional Complementizer (PC) *for*, and finally 4.5 shows that in spite of the similarities between

ʔinna and verbs in both form and meaning, they are still categorically complementizers, not verbs.

4.2. Verbal Properties of *ʔinna*

In this section, I show that *ʔinna* and its sisters share similarities with verbs that other complementizers do not. Similarities between the *ʔinna* family and verbs have been noted in traditional grammars of CA since the Middle Ages. Sibawayhi (760 – 796 AD) notes that 'the five particles' govern[30] nouns in the same manner that verbs do (Sībawayhi 1988:vol. 2 p. 131). He states that *ʔinna* and its sisters are related to verbs in the same way that number constructions are related to active participles (to him a subclass of nouns capable of assigning case). Number terms do not behave morphologically like active participles (I assume he means that they do not inflect like participles), but assign Case like participles. In a sentence like 206, the active particple *Daaribun* (hitter) assigns accusative to *Zayd* just like verbs do. He notes that the relation between the participle and the noun is not a typical nominal-nominal relation such as Construct State (idaafa) or adjective-noun relation.

(206) haatha Daarib-un zayd-an
this hitter-NOM Zayd-ACC
'this is Zayd's hitter.'
(Sībawayhi 1988:vol. 2 :131)

In a similar manner in 207, the number *ʕishreen*a (twenty) assigns accusative to *rajulan* (men) in a verb-like fashion as it cannot be in any other structural relation with it.

[30] The closest concept in current contexts to traditional grammar's concept of government is Case effects. In traditional grammar, the verb governs both the subject and the object; a preposition governs its object, and so on.

However, 'twenty' only behaves similarly to participles, but is not in itself a participle because it does not have the same morphological features, derivational or inflectional.

(207) qaabaltu ʕishreen-a rajul-an
met1S twenty-ACC man-ACC
'I met twenty men.'

Sibawayhi extends that analysis to *ʔinna* and its sisters. He states that they are particles[31], not verbs, because they do not have verbal morphology (subject agreement, nominative, or other verbal morphological properties). They are verb-like, however, in that they assign accusative. More recent accounts of traditional grammar of Arabic maintain the 'verb-like particle analysis'. For example, Ziad[32] (2009, vol. 2) states that the *ʔinna* family receives that label because they are similar to verbs semantically and morphologically: (1) they all have verb patterns, (2) they all have past tense verbal endings, (3) they all have verbal meanings (e.g. *layta* = I hoped), (4) they assign nominative and accusative to their arguments just like verbs, and (5) like some verbs (e.g. the negative copula *laysa* (c.f. the discussion of copula in Chapter 2) or *ʕasaa* 'hopefully') they are morphologically invariable. The latter two observations are based on different theoretical assumptions from modern Arabic generative linguistics. Some such assumptions are that verbs assign both nominative and accusative, tense is not recognized as a separate head, and that 'rigid verbs' are indeed verbs and rigid (traditional part-of-speech dichotomy only allows for a verb-noun-particle trichotomy).

[31] Traditional Arabic grammarians distinguish only three parts of speech: verbs, nouns (which also include adjective and adverbs), and particles (which include everything else).
[32] Ziad's Encyclopedia of Arabic Syntax and Morphology generally expresses mainstream description acceptable to most traditional Arabic grammarians.

In this section, I build on these observations in traditional grammar to argue for the verbal nature of the *ʔinna* family. I will first refine the traditional grammar accounts by showing that although not all those observations are accurate; they can contribute evidence to the verbal nature of *ʔinna*. Some, but not all, members of the *ʔinna* family have the morphology of verbs, although they all have the morphology of accusative-assigning categories relevant to the discussion at hand. I will also discuss briefly other discrepancies in Zeyad's syntactic evidence. I will then provide further evidence to the verbal nature of *ʔinna* and its sisters from CA.

Section 4.2.1 shows morphological resemblance between the *ʔinna* family and verbs and revises traditional grammar observations about the verbal nature of *ʔinna*. Section 4.2.2 shows evidence from the lexical and grammatical usage of CA that indicates the verbal nature of the *ʔinna* family. Section 4.2.3 shows that such verbal properties are unique to the *ʔinna* family and are not shared with other complementizers.

4.2.1. Morphological Evidence

In this section, I show similarities between the *ʔinna* family and verbs. While the similarity between the English complementizer and prepositional *for* is easy to detect – they are identical, the similarity between Arabic VCs and verbs is more subtle. I will show that the *ʔinna* family has the same morphological patterns as the basic verb form in Arabic (form I) or verbal nouns (accusative-assigning derivatives of the verb). The last piece of evidence for the verbal properties of *ʔinna* comes from CA. CA has a set of complementizers similar to the *ʔinna* family but lacks the verbal inflection marker *–a.*

This other set of complementizers does not have any Case effects or word order restrictions on the phrases they introduce. The loss of verbal inflection and its association with the loss of one of the key verbal properties (assigning accusative) is evidence of the verbal nature of the *ʔinna* family.

Before looking at the morphology of *ʔinna* and its family, I will review briefly Arabic word formation. Arabic follows the root-and-pattern system (Badawi, Carter, and Gully 2003; Abu-Charca 2007; Watson 2007; Ryding 2005). Lexical information is provided via the root, a discontinuous morpheme typically consisting of three consonants. A second layer, the pattern, is superimposed on the root to provide derivational morphology. For verbal morphology, MSA commonly uses fourteen patterns, called verb forms I – XIV, encoding in the morphology various verbal properties such as transitivity, reflexivity, causativity, et cetera. For the purposes of current discussion, we are only interested in the basic form of the verb, known as verb form I. Take the citation form of the verb *kataba* (write): the root is triconsonantal (C_1 = *k*, C_2 = *t*, C_3 = *b*), and the pattern of verb form I (basic verb form) is a-a-a. The citation form in Arabic for verbs is the perfective third person singular masculine form (taken to be the default – unmarked – agreement form and is marked through the final vowel -a). There are two patterns for form I verbs: *–a-a-a* and *–a-i-a*, depending on the root. *kataba* (write) and *ʕalima* (know) are both form I verbs in spite of the different second vowel. [33] Another example of derivation is that of adjectives. The pattern $C_1aC_2iiC_3$ is

[33] To give examples of other verb forms, form II is a causative form (to make somebody do the verb X) and follows the pattern $C_1aC_2C_2aC_3a$, applied to the roots in our examples, we get *kattaba* (to make someone

typical of adjective. Combined with roots like *T-w-l* (length) or *j-m-l* (beauty), the adjective pattern produces *jamiil* (beautiful) and *Tawiil* (tall, high), respectively. Other words are derived from verbs, rather than directly from roots. Participles and verbal nouns are a case in point. Taking the root *k-t-b* (write) again, it can produce several verbs such form I *kataba* (write), which we have already seen, and form III *–aa-a-a* which carries reciprocal meaning resulting in *kaataba* (correspond with), among many others. Each of these verbs generate their own active and passive participles using the patterns shown in Table 1. The table shows that participle patterns are applied to verb forms rather than roots, and that participle patterns vary depending on the verb form at hand. I will discuss the form and meaning of verbal nouns in the discussion of *layta* and *ʔinna*.

After this overview of word formation in Arabic, I now move to the morphology of *ʔinna* and its sisters. *ʔanna* and *laʕalla* have similar patterns to a special type of form I verbs known as 'doubled' (geminate) verb roots (Ryding 2005:458; Abu-Charca 2007:218, 322). Form I verbs from roots with $C_2 = C_3$ have a citation form of CvCCa where the two consonants C_2 and C_3 become a geminate.[34] An example of a doubled verb is *Danna* (think). Table 2 shows in the first row how the verb is derived from the root D-n-n by applying form I pattern and germination. Compare this process

write) and *ʕallama* (and to make someone know: teach/educate). Form VI is reciprocal: two participants take part in the act indicated by the verb. It follows the pattern *taC$_1$aaC$_2$aC$_3$a*. Applied to *k-t-b* (write), we get *takaataba* (to write to each other: correspond).

[34] Doubled verbs are the result of a phonological rule. If morphology produces a phonologically unacceptable consonant cluster, the geminate will defuse. For example, a doubled verb *CvCC* carrying first person singular agreement *-tu* is syllabified as *CvCvCtu* instead of *CvCCtu*, to avoid a *CCC* syllable onset, which violates Arabic phonological rules. The complete verbal paradigm of doubled roots is not relevant here; I only focus on the conjugation that is similar to *ʔinna*: the citation form.

Table 1. Derivation of participles from *k-t-b*

Verb form	pattern	Verb	Active participle pattern	Active participle	Passive participle form	Passive participle
Form I (basic meaning)	-a-a-a	Kataba	C1aaC2iC3	kaatib	maC1C2uuC3	maktuub
Form III (reciprocal)	-aa-a-a	kaataba	muC1aaC2iC3	mukaatib	muC1aaC2aC3	mukaatab

to the derivation of *ʔanna* and *(la)ʕalla* in the second and third rows. Given this phonological rule, *ʔanna* and *ʕalla* have the form of a doubled form I from possible roots *ʔ-n-n* and *ʕ-l-l*, respectively. I will explore the meaning of these roots in the discussion of CA evidence. Having shown that *ʔanna* and *laʕalla* show the morphology of doubled form I verbs, I move to another sister of *ʔinna* and argue that it can be morphologically related to verbs. This conclusion is consistent with traditional grammar observations for *ʔanna* and *laʕalla* that they are morphologically similar to verbs. I then move to showing that *ʔinna* and *layta* are not straightforward verbs as indicated in traditional grammar, but their verbal properties are still otherwise available.

Similar to *ʔanna and laʕalla*, *layta* can be morphologically linked to verbs. *layta* follows the pattern of a possible verbal noun of a form I verb. Verbal nouns are nouns that are derived from verbs, rather than roots directly, and indicate the action meaning of the verb often expressed in English using *–ation* or the gerund form (see Ryding (2005:75 – 83) for an overview of verbal nouns). The example in Table 3 compares derivation of the verbal noun of form I verb from the root b-y-ʕ (sell) and l-y-t.

Table 2. Form I Doubled Verbs

Root	Form I verb morphology	Output from phonology
D-n-n (think)	Danana	Danna
ʕ-l-l	ʕalala	ʕalla
ʔ-n-n	ʔanana	ʔanna

Table 3. *layt* as form I verbal noun

Root	Form I verb	Verbal noun
b-y-ʕ (sell)	baaʕa	bayʕ (selling)
l-y-t	Laata	layt

Note that the derivation of verbal nouns in Table 3 generates *layt* rather than *layta*. Final –a is a common inflectional morpheme in MSA. We have seen earlier in this section, in the course of discussing the derivation of form I verbs, that final –a is characteristic of subject agreement on verbs. In nouns, final –a is an accusative marker.[35] Returning to the matter of verbal nouns, Ryding (2005) notes two properties of verbal nouns that are relevant to our discussion of *layta*.

> There are [three] ways in which verbal nouns are distinctive in their use:
> (1) they may serve as the equivalent of an infinitive;
> (2) when the verbal noun is from a transitive verb and serves as the first term in an *iDaafa* […] structure, it may take an object in the accusative case[.]
>
> (Ryding 2005:79)

Verbal nouns can assign accusative case to the objects of their underlying verbs. In 208, the verbal noun *muyaadarat* is derived from the transitive verb *yaadara* (leave). The subject of the underlying verb, the pronominal clitic *–hi*, receives genitive Case under a Construct State phrase (*idaafa*) (Ryding 2005:chap. 8). The object of the underlying,

[35] Final *–a* is also historically associated with the citation form for nouns (Al-Jallad, Leiden University, p.c.)

verb, *l-ʕaaSimat*, receives accusative.

(208) qabl.a muɣadarat.i.hi l-ʕaaSimat.a
before-ACC leaving-GEN.histhe-capital-ACC
'Before his leaving the capital.'

To sum up, *layta* takes the morphological form of verbal nouns, which have strong semantic and syntactic verbal properties. These verbal properties are strong enough to assign a theta role and license accusative case to *l-ʕaaSimat* (the capital). I now move to the remaining member of the family, *ʔinna*, which combines properties from both verbal nouns and doubled verbs.

To see the verbal properties of *ʔinna*, a rather indirect root will be taken, as I could not find a direct correlate from nouns and verbal nouns in the same manner described for the other sisters in Tables 2 and 3. *ʔinna* is a verbal noun derived from a form I doubled verb. Recall from the description of verbal morphology that form I verbs can take the pattern of *–a-a-a* or *-a-i-a*. We have seen earlier that *ʔanna* takes the former pattern. Let us then look at the other pattern for form I: *-a-i-a*. Verbal nouns from form I verbs come in several patterns depending on the lexical verb at hand. There is one verbal noun pattern in specific that is of particular interest to our situation: $C_1iC_2C_3$. Examples of such derivation can be seen in Table 4. The first and second rows show the derivation of form I verbs of the type $C_1aC_2iC_3$, *ʕalima* (know) and *ʕashiqa* (love) and verbal nouns from each. Recall that in the earlier discussion of *layta*, I marked the final vowel as an inflection marker. The third row shows that using the root *ʔ-n-n* (the same root for *ʔanna*, a matter which I will return to shortly), the second column shows a possible verb taking the second pattern of form I. I mark that possible verb with

Table 4. The Derivation of *ʔinna*

Root ($C_1C_2C_3$)	Form I verb ($C_1aC_2iC_3a$)	Verbal noun ($C_1iC_2C_3$)
ʕ-l-m (know)	ʕalima (know)	ʕilm (knowing)
ʕ-sh-q (love)	ʕashiqa	ʕishq
ʔ-n-n	*(ʔanina*)	ʔinn

brackets as this verb form is not attested, also it is shown without applying the phonological rule for doubled verbs. The verbal noun of that verb, applying regular morphological rules, would be *ʔinn,* following the pattern in the previous rows. The similarity between the morphological pattern of *ʔinna* (ignoring the final inflectional vowel –a) and verbal nouns of form I verbs of the type –a-I is an indication that *ʔinna*, like *layta*, has verbal properties.

The analysis above of *layta* and *ʔinna* suggest that traditional accounts that all sisters of *ʔinna* are verbs is inaccurate, at least morphologically. *layta* does not fit into any of the Arabic verb forms, neither does *ʔinna*. For *ʔinna* to be treated as a doubled verb like *ʔanna*, the underlying verb form would be *–i-a-a*, which is not a verb form in Arabic. There is also no phonological reason to justify such metathesis. Another option is to consider *ʔinna* and *ʔanna* the same verb with some phonological rule selecting which variant appears in a given context. In fact, in Sibawayhi (1988), ʔ(a/i)nna is written as one word with both vowels. It is unclear if it is also written this way in the original manuscript, but it is a strong indication that Arabic grammarians take the two words to be pronunciation variants. However, such assumption is unwarranted. The selection between *ʔinna* and *ʔanna* is syntactically, not phonologically conditioned: *ʔinna* introduces matrix CPs and CP complements of the verb *qaala* (say), while *ʔanna*

introduces embedded CPs in subject position, and in object position to all subordinating verbs other than *qaala* (say). The proposed morphological analysis of *ʔinna* raises apparent inconsistencies that need to be clarified: the unavailability of the verb from which the verbal noun *ʔinna* is derived; and the availability of both types of form I verb out of the same root. I will show that each of these two points are not as problematic to the argument of this dissertation as they may initially seem.

First, the discussion of *ʔinna* morphological properties indicates that *ʔinna* and *ʔanna* come from the same root and are derived from two different form I verbs. This assumption is potentially problematic as it is redundant: there is no reason for the same morphological operation (create form I verb) to generate both types of the verb form. Although it may be considered an uncommon imperfection in language design, Arabic does occasionally allow one root to generate form I verbs of both types (Ryding 2005:456). It is reasonable to assume that *ʔinna* is one such root that allows the generation of both form I verbs. In fact, as *ʔinna* and *ʔanna* occur in complementary distribution, with *ʔinna* exclusively heading matrix CPs and complements of *qaala* (say), and *ʔanna* heading only embedded CPs. Complementary distribution between *ʔinna* and *ʔanna* can be used to indicate that they are two flavors of the same thing[36] (allomorphs of verb form I or its verbal noun). Allomorphy, however, is strictly between allomorphs of the same category: an (underlying) verb cannot have two allomorphs – one verb and

[36] Unlike complementary distribution between ʔinna and other sisters where no two sisters may co-occur, which indicates that they belong to the same syntactic category, complementary distribution between ʔinna and ʔanna is morphological: one morphological form appears in a certain environment, the other form in the other environment. This indicates that the two are two variants of the same morpheme, rather than of the same syntactic category.

one verbal noun. But as discussion will show, *ʔinna* and *ʔanna* are neither verbs of verbal nouns; they are complementizers. The morphological evidence at hand here is meant to establish that *ʔinna* and its sisters have verbal properties, rather than establish new categories for them.

The second issue that the morphological evidence to the verbal properties of *ʔinna* raises is the absence of a verb from which *ʔinna* can be derived as a verbal noun. Recall from the description of the data in Table 4 that the verb that follows the pattern $C_1aC_2iC_3a$ with the root *ʔ-n-n* has not been attested. This is not problematic in two ways. First, it is very common for such gaps in derivational paradigms for verbs. Indeed, it is a minority of roots that generate all verb forms. Most roots generate only a subset of verbs for a variety of reasons (semantic or pragmatic). Second, even if the form I form is generated as expected, the phonological rule for doubled verbs will kick in, eliminating the second vowel in the pattern and turning C_2C_3 into a geminate, in effect neutralizing the difference between the form I verbs underlying *ʔinna* and *ʔanna* as *ʔann*. So, whether the verb underlying *ʔinna* is not attested because it is the same as that of *ʔanna* or because it is a gap in the verbal paradigm does not affect the fact that *ʔinna* is morphologically similar to verbal nouns.

To sum up, verbal morphology provides evidence that *ʔinna* and its sisters are morphologically similar to form I doubled verbs or verbal nouns. Such morphological similarity can justify the verbal property – assigning ACC – of *ʔinna* and its sisters. The next section describes evidence from CA about the verbal properties of *ʔinna* and its sisters, and section 4.2.3 shows the absence of such properties in other

complementizers.

4.2.2. Evidence from Classical Arabic

Investigating the properties of *ʔinna* and its sisters in CA offer further evidence to the verbal nature of those complementizers. I will show that the roots for *ʔinna* and its sisters in MSA can be found in CA with related meanings to their respective complementizers. I will also show that the loss of the verbal ending *–a* is related to the loss of the accusative-assigning power of the *ʔinna* family in CA.

Holes (2004:5) notes that chronologically, it is hard to establish a point in time to separate 'Classical Arabic,' a term often used to refer to the variety of Arabic used in the Holy Quran and old texts around the sixth and seventh century, from MSA, which is used to refer to one of the varieties of Arabic often used in formal written discourse starting about the middle of the nineteenth century. He further notes that MSA is the modern descendant of CA 'unchanged in the essentials of its syntax, but very much changed, and still changing, in its vocabulary and phraseology.' (p. 5). This section will look at some of the vocabulary/phraseology that exists in CA, but no longer in MSA, and provides further evidence to the verbal nature of the *ʔinna* family.

First, note that in discussing verb patterns I did not provide a possible MSA meaning for the proposed roots for *ʔinna* or the sisters. In MSA, either such root is not productive (*l-y-t*) (if such root exists, it does not combine with any pattern to generate any word other than *layta*) or its meaning is not transparently related to the complementizer (*ʔ-n-n* 'groan,' *ʕ-l-l* 'sick,' 'give reason'). However, in CA, the roots and patterns fit more closely, as attested in CA vocabulary and phrases that fell out of

modern use. In fact, the CA verb *laata* ‘lack’ has *layta* as its verbal noun (Ibn Manẓūr 1955). It is possible to see how the concept of unavailability of something can develop over time to express regret about the unavailability of something. In CA, a noun derived from *ʔanna – maʔinnat* - is attested to mean ‘evidence,’ as can be seen in 209 (Ibn Manẓūr 1955).

(209) ʔinna Tuul-a S-Salaat-i wa qiSar-a
indeed length-ACC the-pratyer-GEN and shortness-ACC

l-xuTbat-i maʔinnat-un min fiqh-i
the-speech-GEN evidence-NOM for knowledge-DAT

r-rajul-i
the-man-GEN

‘Shortness of the prayer and brevity of the sermon is evidence of a person’s good [religious] knowledge.’
(Saying of Prophet Mohammed)

Although the actual verb from which the noun *maʔinnat* in the example above could not be attested, applying regular derivation rules will predict that a form I verb from that noun should be *ʔanna*, with meaning in the neighborhood of giving evidence, telling, or informing.

Finally, the root ʕ-*l*-*l* in CA has a meaning of ‘second’ as in a second serving of food or drink. The verb *ʕalla* is to do something repeatedly (Ibn Manẓūr 1955; Fīrūzābādī 2008; Jawharī 1979). It is possible to see how the sense of the verb could evolve over centuries to include expectation or hope: for a person to go for a second serving of water, or food, this is an indication that this person needs/wants more water. The concept of wanting and needing is closely related to looking forward to/hoping, and could be derived from it.

The complementizer *laʕalla*, **in its complementizer sense**, is indicated in CA grammar reference (Ibn Manẓūr 1955; Sībawayhi 1988) to carry third person feminine singular subject agreement; the suffix *–at in* 210:[37]

(210) laʕall.at CA
hopefully.3FS

(Ibn Manẓūr, 1955, entry 'l-y-t')

In 210, *laʕalla* carries subject agreement, not object clitic (which would be *–aha* for third person feminine singular). This word is probably rare, but is attested in CA grammars. They only refer to the verb carrying agreement, with no complete sentences indicating the behavior of *laʕallat*. What matters for our purposes, however, is that this agreement marker is a verbal property. It is unclear if historically *laʕalla* had a full set of verbal inflections, or whether the loss of its verbal inflection (at least the one inflection attested here) is related to the loss of its CA meaning of repetition. It is reasonable, however, to assume that (*la)ʕalla* lost the meaning of repetition and acquired that of hope, and that such shift in meaning coincides, though not perfectly, with loss of verbal agreement inflection. If true, this indicates that (*la)ʕalla* has verbal origins.

In section 4.2 we saw that in MSA *ʔinna* and its sisters end in *–a*, an ending typical of perfective verbal inflection. CA has two sets of complementizers: *ʔinna* and its sisters, which is attested in MSA, and 'lighted *ʔin* and its sisters.'[38] They are

[37] Although phonetically the suffix *–at* is homophonous to other singular feminine markers (e.g. on adjectives and nouns), orthographically, it is unambiguously a suffix that attaches to verbs.

[38] Literature often refers to 'lighted *ʔan*,' (e.g. LeTourneau 2009) as it is the more common sister. There is no consensus as to whether any of the sisters of *ʔan* is still in use in MSA. For example, LeTourneau (2009) discusses only *ʔan*, while Ryding (2005) ignores *ʔan* and discusses *lakin* (but). I therefore take the safer option and look at the full set in CA, drawing on the fact that it is morphologically and syntactically close to MSA.

complementizers similar in meaning and form to members of the *ʔinna* family, but lack the verbal inflection ending *–a*. They end in zero-vowel, typical of function words[39] rather than verbs. Table 5 shows that each sister of *ʔinna* has a corresponding sister of *ʔin*, except for *laʕalla*. Interestingly enough, sentences introduced by *ʔin*-type complementizers do not have any Case or word order effects on their sentences. They do not induce a ban on verb-first word order, and their subjects are nominative. In 211, *ʔan*, but not *ʔanna*, may be followed by the verb *sayakuun* (will be). As for case effects, In 212a, *laakin* ('but,' sister of *ʔin*) is followed by the same word order as *laakinna*, in b, but the subject *siʕr* (price) receives nominative case marking in a, rather than accusative (under *laakinna* in b).

(211) ʕalima ʔan/*ʔanna sa-yakuunu min-kum marDaa
knew3MS that will-be in-you sick-pl
'He knew that there will be sick [people] among you.'

(212) a. l-quTn.u qaliil-un laakin siʕr.u.hu raxiiS-un
the-cotton-NOM little-NOM but price-NOM.its cheap-NOM

b. l-quTn.u qaliil-un laakinna siʕr.a.hu raxiiS-un
the-cotton-NOM little-NOM but price-ACC.its cheap-NOM
'Cotton is short [in quantity] but its price is cheap.'

The contrast between *ʔinna* and its sisters and *ʔin* and its sisters shows that *ʔinna* and its sisters, which have verb-like morphological endings, have verb-like syntactic behavior (they assign ACC). *ʔin* and its sisters lack both morphological and case properties. This comparison points us farther in the direction that *ʔinna* and its sisters

[39] I use the term 'function word' as contrasted to 'content words' in their general sense (Fries 1952). Function words include pronouns, prepositions, and conjunctions. Function words in Arabic are always uninflected.

Table 5. *ʔin* and its sisters

ʔinna and its sisters	*ʔin* and its sisters	meaning
ʔinna	ʔin	indeed
ʔanna	ʔan	that
kaʔanna	kaʔan	as though
Lakinna	lakin	but
Layta	layt	If only
laʕalla	-	hopefully

have some verbal property[40] as will be seen in the next section.

In this section, I have shown morphological and syntactic evidence from CA that point at the verbal nature of *ʔinna*. CA roots that generate *ʔinna* and its sisters have meanings that are related to their MSA meaning. *laʕalla* in CA may carry subject agreement similar to that of verbs. Finally, *ʔinna* and its sisters have CA variants that lack verbal endings, which coincides with their lack of ability to assign accusative Case or ban verb-initial complements. This evidence strongly points to verbal nature of *ʔinna* and its sisters.

4.2.3. Other Complementizers

Other complementizers *ʔin*, *ʔitha,* and *law* (if with the various degrees of certainty), which do not assign accusatives or pose word order restrictions, do not

[40] Although it is possible to hypothesize that as CA developed to MSA, one of the two sets of complementizers were lost. It is unclear, though, why the *ʔinna* family survived into MSA rather than *ʔin* family. It would make sense that as the set loses its verbal nature it would also lose its verbal morphology. This expectation is supported by the fact that in modern Arabic dialects (colloquial), verbs have lost their final –*a* marker in citation form, and indeed all final vowels on verbs and nouns. The more logical option, then, is for the morphologically simpler variant which is consistent with other complementizers to survive to MSA. It is unclear why the more complex variant is the one in current use. I leave this question to further research, perhaps in historical linguisitics.

demonstrate morphological resemblance to verbs. Starting with *law*, traditional Arabic grammars (e.g. Rāzī 1986) list *law* under a biliteral root *l-w*, with no other words derived from that root. Biliteral roots are rare in Arabic, and they generate lexical 'orphans,' single words with no other lexical items from the same root. Examples of other lexical items from bi-lateral roots *min* 'from' from the root *m-n*; *ʕan* 'about' from *ʕ-n*; and *ʔaw* 'or' from the root *ʔ-w*. None of these words generate other lexical items. Of course, it is possible that *law* has come from a triliteral root (*l-w-w*), like earlier proposed for *ʔanna* in CA. However, the root does not exist, and no words are derived from *l-w-w* in MSA or CA, unlike the case with *ʔanna*, where *ʔ-n-n* is an attested root with a number of derivatives. The fact that *law* is the only derivative from the root makes it reasonable to group it with other orphans under a biliteral root umbrella. So, the absence of morphological verbal endings, and lack of lexical evidence for a possible verbal derivation show that *law* does not have any verbal properties like those seen with the *ʔinna* family.

ʔin, and *ʔi<u>th</u>a,* do not have morphological relation to verbs. They both invariably end in the consonant /n/ or long vowel /a:/, neither a mark of verbs. Both *ʔin*, and *ʔi<u>th</u>a,* have their first syllable with the vowel *i*, which does not appear in any verb form in that position.

Before we move to the next section, where we see that the *ʔinna* family share illocutionary properties, I look back at traditional grammar accounts of *ʔinna* I have referred to at the beginning of this section, and contrast them with the account given here. Traditional grammar indicates that *ʔinna* and all its sisters are morphologically

verbs. The discussion here shows that only two of the sisters are morphologically similar to verbs, while the other two are similar to verbal nouns. This fact has little bearing on our conclusions, as verbal nouns can also assign accusative. Traditional grammar also notes that *ʔinna* and its sisters all end in verbal suffix, *-a*. My analysis shows that final *–a* can be used as evidence for the verbal nature of some of the sisters, but in cases where a sister is considered a verbal noun, it is clearly an inflectional marker of some sort. It is not clear whether it is an inflectional marker of a verb, marking some sort of part-of-speech shifting, or a nominal inflection that is chosen (rather than another inflection) to mark consistency with other sisters. It is also not a substantial question: derivation (rather than inflection) for *layta* and *ʔinna* provide good evidence to their verblike nature. Traditional grammar also marks that the meaning of the *ʔinna* family is the same as that of verbs. I will explore this observation further in the next section, showing that *ʔinna* and its sisters do share semantic and structural properties with verbs, specifically the illocutionary properties of verbs that share their meaning.

4.3. Illocutionary Properties of *ʔinna*

Up to this point in the chapter, we have seen morphological evidence that *ʔinna*-type complementizers have the shape of verbs or verbal nouns. In this section, I show that *ʔinna*-type complementizers share properties with illocutionary verbs in terms of meaning/use. In addition to the previous discussion in Chapter 2, indicating that *ʔinna* complementizers have the meaning of illocutionary verbs, their distribution provides more evidence to their illocutionary properties. Section 4.3.1 shows that *ʔinna, layta*, and *laʕalla* occur in complementary distribution with illocutionary verbs indicating

assertion, regret, and hope, respectively. Section 4.3.2 shows that the use of a given sister of *ʔinna* restricts the choice of adverbial adjuncts to only those which indicate similar attitudes. I show in section 4.3.3 that the properties of the *ʔinna* family which they share with illocutionary verbs are not shared with other complementizers.

4.3.1. Complementary Distribution with Illocutionary Verbs

As indicated in 2.3.1, *laʕalla* 'hopefully' is used to indicate hope, and *layta* 'I wish' is used to indicate regret. In addition to their meaning, *layta* and *laʕalla* cannot co-occur with an illocutionary verb, even if it has the same illocutionary force, which is evidence that they perform the same illocutionary function. Take *laʕalla*, to start with. The sentences in 213 and 214 have the same meaning, that the speaker hopes that the president will solve the problem. The speaker's hope is expressed in 213 through the use of the illocutionary verb *aʔmalu* 'I hope', and in 214 through the use of *laʕalla* 'hopefully'.

(213) **aʔmalu** ʔanna rraʔiisa sayaHillu l-mushkilati
I hope that the.president will.solve the-problem
'I hope that the president will solve the problem.'

(214) **laʕalla** rraʔiisa sayaHillu l-mushkilati
hopefully the.president will.solve the problem
'I hope that the president will solve the problem.'

Note that the verb *aʔmalu* 'I hope' can be used in sentences as statements with no expressive illocutionary force. The sentence in 215 states the feelings of the ministers as that of hope, with nothing to say about the attitude of the speaker.

(215) l-wuzaraaʔu yʔmaluuna ʔanna rraʔiisa sayaHillu l-mushkilati
the-ministers hope3MP that the-president will-solve the-problem
'The ministers hope that the president will solve the problem.'

laʕalla, on the other hand, can only be used in sentences with expressive illocutionary force in the manner shown in sentence in 214. Using *laʕalla* in a sentence where it is not speaker-oriented results in an ill-formed sentence 216.

(216) *lwuzaraaʔu laʕalla rraʔiisa sayaHillu l-mushkilati
the ministers hopefully the president will solve the-problem
'The ministers hope that the president will solve the problem.'

laʕalla and *aʔmalu* 'I hope' (in its expressive sense) cannot co-occur in the same sentence, as demonstrated in the ungrammaticality of 217. This distribution restriction can be explained by positing that the expressive force of the sentence can be carried by verb *aʔmalu* 'I hope,' or *laʕalla*, but not both.

(217) *aʔmalu laʕalla rraʔiisa sayaHillu l-mushkilati
I hope hopefully the.president will.solve the-problem
'I hope that the president will solve the problem.'

The same behavior can be seen with *layta* ('I wish,' 'if only'), which indicates regret. Comparing the sentences in 218 and 219 shows that *layta* serves the same purpose as the illocutionary verb *ʔatamanna* (I wish); to indicate regret that the proposition of the complement is not true.

(218) **ʔatamanna** law ʔanna naadia zaarat faransa
I wish if that Nadia visited France
'I wish Nadia had visited France.'

(219) **layta** naadia zaarat faransa
if only Nadia visited France.
'If only Nadia visited France.'

And like *laʕalla*, a sentence like 220, with both *ʔatamanna* and *layta* is ungrammatical. This can be explained by positing that the illocutionary force feature [regret] can be carried by the illocutionary verb, or by *layta*, but not both.

(220) *ʔatamanna (law) **layta** naadia zaarat faransa
I wish (if) if only Nadia visited France
'I wish Nadia had visited France.'

Similar to *layta* and *laʕalla*, *ʔinna* cannot co-occur with an assertive illocutionary verb. In 221 and 222, assertion is achieved via *ʔinna* and the illocutionary verb *ʔuʔakidu* (I assert), respectively. The ungrammaticality of 223 shows that *ʔinna* cannot co-occur with an illocutionary verb of assertion.

(221) **ʔinna** naadia zaarat faransa
indeed Nadia visited France
'Indeed Nadia visited France.'

(222) **ʔuʔakidu** ʔanna naadia zaarat faransa
I assert that Nadia visited France
'I assert that Nadia visited France.'

(223) *ʔuʔakidu **ʔinna** naadia zaarat faransa
I assert indeed Nadia visited France
'Nadia visited France.'

To sum up, *ʔinna*-type complementizers at matrix CP occur in complementary distribution with illocutionary verbs that have the same meaning. This complementary distribution highlights the illocutionary nature of the *ʔinna* family, and also supports the verbal nature of *ʔinna*. *ʔanna*, the remaining sister of *ʔinna*, may not introduce matrix CP.

4.3.2. Interaction with Adjuncts

ʔinna-type complementizers share another property with illocutionary verbs; they restrict the choice of adverbials to those expressing the same attitude. Take the two adjunct *ʔin shaaʔa l-llah* (God willing) and *li l-ʔasaf* (regrettably). The former is used to indicate hope and can occur with *laʕalla* (224), or with an illocutionary verb like

aʔmalu (I hope) (225).

(224) laʕalla naadia ʔin shaaʔa l-lah satazuuru faransa
hopefully Nadia if wanted God will visit France
'Hopefully Nadia will, God willing, visit France.'

(225) aʔmaluʔanna naadia ʔin shaaʔa l-lah satazuuru faransa
I hope that Nadia if wanted God will visit France
'Hopefully Nadia will, God willing, visit France.'

li l-ʔasaf (regrettably) can occur with neither. The sentences in 226 and 227 are the counterpart of 224 and 225, but with *li l-ʔasaf*. They are semantically anomalous, which I indicate with an exclamation point, due to the conflict between the semantics of adjunct and that of the illocutionary verb 227 or *laʕalla* 226.

(226) ! laʕalla naadia li lʔasafi satazuuru faransa
hopefully Nadia with regret will.visit France
'hopefully Nadia will visit France, regrettably.'

(227) ! aʔmalu ʔanna naadia li lʔasafi satazuuru faransa
I.hope that Nadia with regret will.visit France
'hopefully Nadia will visit France, regrettably.'

layta shows similar behavior to that of *laʕalla* vis-à-vis selection of adjuncts expressing speaker attitudes. Like illocutionary verbs, it does not allow adjuncts with incompatible speaker attitude. The sentences in 228 and 229 express the speaker's attitude towards the proposition of its complement. In 228 the speaker regrets that the complement to *layta* is false . In 229 the speaker regrets that the complement of the illocutionary verb *ʔaʔsafu* (I regret) is true.

(228) layta naadia satazuuru faransa
if only Nadia will.visit France
'If only Nadia would visit France.'

(229) ʔaʔsafu ʔanna naadia satazuuru faransa
sorry1S that Nadia will.visit France
'I regret that Nadia will visit France.'

The use of the adjunct *ʔin shaaʔa l-llah* 'God willing,' which indicates hope, with either *layta* (230) or the illocutionary verb (231), renders the sentences anomalous. The semantic anomaly in 231 is due to the conflict between the speaker attitude encoded in the adjunct and that encoded in the illocutionary verb. In 230, the anomaly of the sentence is due to the conflict between the speaker attitude encoded in the adjunct and that of *layta*. This parallel between the two sentences suggests that *layta* encodes speaker attitudes in a manner similar to illocutionary verbs.

(230) ! layta naadia in shaaʔa llah satazuuru faransa
if only Nadia if wanted God will.visit France
'If only Nadia would, God willing, visit France.'

(231) ! ʔaʔsafu ʔanna naadia in shaaʔa llah satazuuru faransa
sorry1S that Nadia if wanted God will.visit France
'I regret that Nadia would, God willing, visit France.'

4.3.3. Other Complementizers

Other complementizers – *ʔin*, *ʔitha, law* ('if with the various degrees of certainty') – which do not assign accusatives or pose word order restrictions, do not demonstrate illocutionary properties. Unlike *ʔinna* and its sisters, conditionals may co-occur in a sentence with an illocutionary verb indicating uncertainty, as can be seen in 232.

(232) tasaaʔaluu ʔin/*ʔitha / law* kaanat naadia sa-tazuuru faransa
wondered3MP if be3FS Nadia will-visit France
'They wondered if Nadia would visit France.'

In 232, the illocutionary verb *tasaaʔaluu* ‘they wonder’ occurs in the same sentence with *ʔin*, *ʔitha,* or *law*. The fact that these complementizers may co-occur with an illocutionary verb can be interpreted as lack of illocutionary force features on the complementizers.

Conditional complementizers do not restrict the use of adjuncts encoding speaker attitude either. A clause introduced by any of these complementizers may include an adjunct that indicates regret, such as *li l-ʔasafi* ‘regrettably’ in 233, hope, such as *ʔin shaaʔa l-lah* ‘God willing’ in 234, or certainty, such as *bi l-taʔkiidi* ‘with certainty / certainly’ in 235.

(233) tasaaʔaluu ʔin/ʔitha / law kaanat naadia li-lʔasafi sa-tazuuru faransa
wondered3MP if be3FS Nadia with-regret will-visit France
‘They wondered if Nadia regrettably would visit France.’

(234) tasaaʔaluu ʔin/ʔitha / law kaanat naadia ʔin shaaʔa llah sa-tazuuru faransa
wondered3MP if be3FS Nadia if wanted God will-visit France
‘They wondered if Nadia, God willing, would visit France.’

(235) tasaaʔaluu ʔin/ʔitha / law kaanat naadia bi ltaʔkiidi sa-tazuuru faransa
wondered3MP if be3FS Nadia with certainty will-visit France
‘They wondered if Nadia would certainly visit France.’

Note that the adjunct in 235 is incompatible (in meaning) with the illocutionary verb in the matrix CP. It cannot adjoin in the matrix clause, as can be seen in the ungrammaticality of 236.

(236) *tasaaʔaluu bi l-taʔkiidi ʔin/ʔitha / law kaanat naadia sa-tazuuru faransa
wondered3MP with certainty if be3FS Nadia will-visit France
‘They wondered with certainty if Nadia would visit France.’

The illocutionary verb *tasaaʔaluu* ‘they wondered’, like *ʔinna*-type complementizers and unlike conditional complementizers, does not allow an adjunct with contradictory

meaning (i.e. that of certainty). This shows another similarity between *ʔinna* and illocutionary verbs.

To sum up, conditional complementizers differ from *ʔinna*-type complementizers and illocutionary verbs. Their distribution is not restricted vis-à-vis illocutionary verbs, and they do not restrict adjuncts even if their meaning is contradictory to the illocutionary force of the sentence.

4.4. *ʔinna* a Verbal Complementizer

In the previous sections, we have seen that the *ʔinna* family has several verbal properties. They share some morphological properties with illocutionary verbs. They are also followed by accusative DPs. Given the facts about the verbal nature of *ʔinna*, the behavior of *ʔinna* can be explained in two ways. It is either a 'verbal complementizer' that is responsible for accusative DPs in spec,T in a manner similar to the English *for* in complementizer position, or a V head that licenses accusative inside the complement TP under ECM. I adopt the former explanation for this dissertation and compare it to English *for*, and show in the next section that the latter explanation is inferior. Chapter 5 discusses in detail Case licensing through complementizers in Arabic.

Given the similarities in form and meaning between *ʔinna* and illocutionary verbs, as we have seen earlier in this chapter, it is reasonable to attribute the accusative case of the subject to the verbal nature of *ʔinna* in the same way that subjects in English subordinate clauses introduced by *for* show accusative. By 'Verbal Complementizers' I mean that *ʔinna* and its sisters are morphologically and lexically verbs that occupy a complementizer position. The discussion of the properties of the *ʔinna* family so far

leads us to the conclusion that *ʔinna* is indeed a complementizer which can assign accusative, a property of verbs that can be reasonably assumed to have acquired alongside other properties discussed in the previous sections. There is another complementizer, in English, with similar properties to *ʔinna; for*. Take a sentence like 237, *for* is in C, while lexically it belongs to another category (P), similar to *ʔinna*, which occupies a C position while morphologically belonging to another category (V). Furthermore, both complementizers affect the case/Case of the subjects in their complements. In a sentence like 237, *for* is a complementizer that takes the shape of a preposition, and assigns accusative to the subject *her*.

(237) For her to succeed pleases me.

Given the similarities between CPs introduced by *for* and those introduced by *ʔinna*, it is tempting to claim that accusative subjects after *ʔinna* receive their Case in the same way as *for*. However, Case valuation under *for* is different from Case under *ʔinna*. While *for* takes infinitival TP complements, *ʔinna* takes finite TP complements. This difference is significant for our account as it can explain accusative subjects under *for* without posing any special mechanisms, but not for *ʔinna*. In English, when *for* merges with its TP complement, it can find an active goal for the Case probe to value in spec,T. This goal is available for *for* because infinitival T cannot value Case. In Arabic, when *ʔinna* merges with its finite TP complement, the subject in spec,T should be unavailable for Case valuation by *ʔinna* under the same assumptions for English: finite T will value its Case rendering it inactive and unavailable for ACC on *ʔinna*.

This discrepancy between *ʔinna* and *for* can be accounted for if

Complementizers, rather than Tense heads, are responsible for Case valuation in Arabic, hence offering additional support for FI-based theory. Given the basic structure of SVO sentences in 238, case variation on the subjects can be accounted for straightforwardly through the type of C head: null C and conditionals value their Case on subjects as NOM, while *ʔinna* values Case on subjects as ACC due to their verbal nature. I will discuss Case valuation in different word orders in detail in Chapter 5.

(238) $[_{CP}\ C_{CASE}\quad [_{TP}\ DP_{CASE}\quad T_{EPP}\ [_{vP}\ DP\ v\ \ldots\ldots]]]$

All in all, *ʔinna* in Arabic is similar to *for* in English in that both complementizers value Case within their complement phrase with the value which their original (i.e. lexical) part of speech would value its complement. *For* subcategorizes for infinite TPs, which makes it unsusceptible to the drawbacks of Multiple Case faced by *ʔinna*. Case valuation under *ʔinna* can be accounted for if C heads in Arabic are consistently allowed to undertake Case valuation, as we will see in the next chapter.

ʔinna's ability to assign accusative case because of its verbal nature may have some interesting theoretical implications. There is ample evidence that *ʔinna* has properties of verbs, just like the English *for* has properties of prepositions. But accusative Case licensing does not come from root categories, but rather from functional categories (light v in the case of verbs) (Chomsky 1995a), an idea which builds on the arguments related to Burzio's Generalization (Burzio 1986) . Why, then, is accusative associated with *ʔinna*, even with its verbal nature? One implication in this area is that the line between lexical and functional categories is not as sharp as we would like to think. It could be that the morphological process generating verbs in the

root-and-pattern morphology (from roots + verb-form patterns) has the light v features built-in in the selection of transitive patterns in some way. For example, Lex will provide *katab* 'write' which already has the root *k-t-b* with the lexical feature, and the pattern $C_1aC_2aC_3$ which encodes v properties – such as Case – in addition to morphological properties of the verb, blurring the lexical-categorical distinction. Another direction could be in considering *ʔinna* a hybrid lexical item that has acquired both lexical and functional features. An approach in that direction will build on Roberts and Roussou's (2003) approach to grammaticalization. Roberts and Roussou show several examples of verbs undergoing grammaticalization into C (e.g. in languages like Greek, Buru, and Tukang Besi). They argue that grammaticalization generally moves upwards (e.g. V > C, and not vice versa) and that in some cases verbs stop at an intermediate stop (I) in their grammaticalization journey towards becoming complementizers. If we are willing to accept Roberts and Roussou's view of grammaticalization, we may be willing to accept that *ʔinna* is a hybrid head that combines V-v-C characteristics: a C head that has V morphology (and semantics) and v Case features. More research in historical linguistics and grammaticalization can shed more light in that direction.

Before we move to the next chapter, there remains a final alternative analysis to eliminate. We will see in the next section that in spite of the similarities between *ʔinna* and verbs, they should not be treated as V heads.

4.5. *ʔinna* Not a Verb

In this section, I show that the alternative analysis of *ʔinna* as a V head is inferior theoretically and empirically to the adopted analysis that *ʔinna* is a verbal

complementizer. *ʔinna*-type complementizers do not show agreement or interact with negation similar to verbs. The properties of their TP complements are different from those of (ECM) verbs,

We have already seen evidence that the *ʔinna* family have verbal properties, and that an analysis of this set as verbal complementizers would resolve the accusative subject dilemma. However, given all the verbal properties of ʔ*inna*, one must wonder about the possibility that *ʔinna* is an illocutionary verb; it looks like a verb and acts like a verb (assigns accusative perhaps under ECM), after all. Although the *ʔinna* family does not show agreement in MSA, it could be argued that they all have default (3MS) agreement. Default agreement with 'impersonal' verbs does exist in Arabic, with the verb *yabduu* (seem) in MSA.

(239) yabduu ʔanna l-banat-i saafarna
seem3MS that the-girsl-ACC departed3FP
'It seems that the girls departed.'

In 239, the verb *yabduu* (seem) shows third person masculine agreement in the lack of an overt subject. Recall from section 3.1.2 that Mohammad (2000) uses the default agreement on *yabduu* to argue for an expletive *pro*, which is underspecified for number and gender. Likewise, *ʔinna* could be an impersonal illocutionary verb.

However, analyzing the *ʔinna* family as verbs runs into serious shortcomings. First, unlike *yabduu*, *ʔinna* does not show agreement with overt subjects. In 240 the verb *yabduu* shows default agreement with null subject, while in 241 and 242, the verb has an overt subject (*mona*), and shows third person feminine agreement (the suffix *ta*-) in both VS and SV word order.

(240) yabduu ʔanna mona mariidat-un
seem3MS that Mona sick-NOM
'It seems that Mona is sick.'

(241) tabdu mona mariidat-un
seem3FS Mona sick-ACC
'Mona seems sick.'

(242) mona tabdu mariidat-un
Mona seem3FS sick-ACC
'Mona seems sick.'

ʔinna and its sisters, on the other hand, do not allow overt subject agreement. The sentence in 243 is grammatical. The sentence in 244, corresponding to 242, is ungrammatical regardless of the presence of feminine agreement marker (*-at* after *layta*).

(243) layta mona Tayyibat-un
if only Mona kind-NOM
'if only Mona were kind.'

(244) *mona layta/laytat Tayyibat-un
Mona if only kind-NOM
'If only Mona were kind.'

The *ʔinna* family cannot show agreement under nonraising conditions either. If the person regretting '*Mona is not kind*' is overtly specified, *layta* cannot be used. The sentences in 245 and 246 are ungrammatical. The sentence in 245 contains the verbs *layta* and *laʕalla* with first person agreement morphology (as *lattu* and *laʕaltu*, respectively). In fact, the ungrammaticality of the sentence is due to the fact that *lattu* and *laʕaltu* do not exist: *layta* and *laʕalla* cannot carry agreement.

(245) *lattu/laʕaltu mona Tayyibat-un
if only1S/hopefully1S Mona kind-NOM
'If only/I hope Mona is not kind.'

The sentence in 246 is ungrammatical with overt subject pronoun, with or without agreement marker on *layta* and *laʕalla*.

(246) *ana {layta, lattu, laʕalla, laʕaltu} mona Tayyibat-un
I {if only, if only1S, hopefully, hopefully1S} Mona kind-NOM
'If only/ I hope Mona is not kind.'

Other illocutionary verbs, on the other hand, show subject agreement, and allow overt subjects in their sentences. In 247, the verb *atamanna* (I hope) is inflected for first person singular subject, and the overt subject *ana* (I) is optional.

(247) (ana) atamana ʔan takuun mona Tayyibat-un
I hope1S to be Mona kind-NOM
'I hope Mona would be kind.'

Another argument against considering the *ʔinna* family illocutionary verbs can be seen through their interaction with negation. While illocutionary verbs can fall within the scope of a negation particle, *ʔinna* cannot. The sentence in 248, where the negative particle *laa* is higher than the illocutionary verb *atamana* (I hope) is grammatical,[41] but a similar position of *laa* above *ʔinna* (249) renders the sentence ungrammatical (under the interpretation given, or any other interpretation). This suggests that *ʔinna* is higher than the verb.

(248) (ana) laa atamana ʔan takuun mona Tayyibat-un
I not hope1S to be Mona kind-NOM
'I do not hope Mona would be kind.'

(249) * laa ʔinna zaydan yadrusu l-handasati
not that Zaud study3MS the-engineering
'Zayd does not study engineering.'

[41] The sentence is ambiguous as to the scope of negation. It is grammatical under the interpretation where the negation takes scope over the lower TP, and is also grammatical under the interpretation where the negation takes scope over matrix T.

One could attempt a feature-based explanation to preserve an analysis of the *ʔinna* family as V heads by posing that they are verbs that lack certain characteristics such as an external theta role and T feature. *ʔinna* could then assign accusative in an ECM-like fashion. The sentences in 250 and 251 show the parallelism between the complement of *ʔinna*'s sister *layta* (if only) and the complement of the ECM verb *ʔaraada* (want). In 250, the ECM verb takes a TP complement, and can probe into it, where it can value the Case of the (nonfinite) T subject as ACC. In 251, *layta* is a verbal head that takes a TP complement and can value the case of the subject in spec,T as ACC.

(250)	[$_{CP}$ ……	naadyya	ʔaraadat$_{V}$	[$_{TP}$ zayd-an	ʔan	yazuura	salwa]]
		Nadia	wanted	Zayd	to	visit	Salwa
			(ECM verb)	(ACC)	(inf.)	V-SUBJ	(ACC)
	'Nadia wanted Zayd to visit Salwa.'						

(251)	[$_{CP}$ ……	layta$_{V}$	[$_{TP}$ zayd-an	yazuuru	salwa]]
		if only	Zayd	visit	Salwa
		(ECM verb?)	(ACC)	V-IND	(ACC)
	'If only Zayd would visit Salwa.'				

One major difference between *layta* and the ECM verb is the tense of the complement of the verb. While the TP complement of ECM verbs is infinitival, the complement of *layta* in 251 is in the present tense. This difference is crucial. The infinitival T in 250 is incapable of assigning Case, while in 251, the finite T is capable of assigning Case, which gives rise to a case of MCA problem discussed earlier.[42] One may account for the availability of *Zayd* for accusative by posing that the complement of *layta* is indeed infinitival, and that somehow the time reference (and verb morphology) is due to another

[42] This discrepancy is neutralized if we assume that NOM is received via FI. If Case is received from C-T via inheritance, then the absence of C can keep spec,TP available for valuation by both the ECM verb and *ʔinna*.

projection such as aspect. However, this account unnecessarily complicates the grammar of Arabic, especially for sentences not introduced by *ʔinna*, where nominative Case will either be received from Asp. head – reviving the MCA problem, or under DCA, already shown to be problematic. The sentence in 252 is a case in point. It is the counterpart of 251, but lacks *layta*.

(252) [$_{CP}$ …… [$_{TP}$ zayd-un yazuuru salwa]]
Zayd visit Salwa
(NOM)V-IND (ACC)
'Zayd visits Salwa.'

Any analysis that argues that the TP complement of *layta* in 251 as lacking finite tense must explain the nominative subject in 251. An explanation under DCA will render *ʔinna*-as-verb inferior to *ʔinna*-as-complementizer, as the latter avoids DCA and its shortcomings discussed in Chapter 3. An explanation that attributes nominative to another head present in the phrase will fall victim to MCA, as that head will be available in 251 and will assign NOM before *ʔinna* can assign its accusative. Consequently, this explanation *ʔinna*-as-verb inferior to *ʔinna*-as-complementizer, as the latter avoids MCA and the disadvantages stated in Chapter 3.

In this section, I have shown that, in spite of the illocutionary verbal properties of the *ʔinna* family, they are C, not V heads. Analyzing *ʔinna* as an ECM verb taking a finite TP complement complicates Case assignment for the subject and reintroduces MCA and DCA. In the next section, I show that the alternative analysis, that *ʔinna* is a C head that has kept some of its original verbal characteristics, is a more elegant, less problematic analysis.

5. CASE FROM C

In the previous chapter, we have seen the similarities between *ʔinna*-type complementizers and verbs. We have also seen that *ʔinna* cannot value Case in its complement TP in the same way that English *for* does, raising the need for all Case on spec,TP to be valued via a higher head – C, in our case. This chapter accounts for Case facts under *ʔinna* and null complementizers (recall that as far as Case and word order are concerned, conditionals and null complementizers have identical behavior). Null complementizers and conditionals value Case on subjects as NOM in both preverbal and postverbal subjects. *ʔinna*-type complementizers value Case as ACC in preverbal subjects, and nominative in postverbal subjects.

Section 5.1 accounts for Case valuation under different word orders – SV, VS, following adverbials, and expletives. Section 5.2 discusses how the proposed analysis avoids the problems of DCA and MCA.

5.1. Case Valuation

In this section, I give an account of case/Case valuation under *ʔinna* in the various word orders. We have seen in the last chapter that verbal complementizers in Arabic are associated with accusative case of the subject in some word orders. I also noted that the nominative-accusative alternation can be accounted for in terms of complementizer variation if we take C to be the locus of Case valuation, rather than T. In

fact, the assumption that C is responsible for case on the subject is consistent with the theoretical assumptions of this thesis.

I begin by laying out assumptions about the role of C heads in Case valuation, then move to demonstrating how these assumptions can derive case and word order variation, and discuss areas where data seems inconsistent with the theoretical framework. Section 5.1.1 describes how Case features originating from C can explain the nominative-accusative alternation under different complementizer types. Section 5.1.2 shows that considering Case as a reflect of phi features can help explain postverbal nominative case in *ʔinna* clause as an instance of partial Case agreement (anti-Case). Section 5.1.3 shows that *ʔinna* clauses where *ʔinna* is followed by an expletive are, in fact, instances of SV-type clauses, and can receive the same analysis as the word order discussed in 5.1.1.

Following Chomsky (2008), I take Case to be a reflect of phi features on C. As C merges to the structure with TP, Case is transferred to T as part of (phi) FI. T is now a probe and can value phi and Case features with the subject. My account of *ʔinna* as a VC is mostly compatible with earlier versions of phase theory (Chomsky 2001) where both T and C have unvalued phi sets and T enters into Agree with the subject after C merges. I discuss the implications of the noninheritance approach in the next chapter. Arabic complementizers come in two flavors. VCs value Case on the subjects as ACC, influenced by their morphological verbal properties and select TPs that have the EPP property. Null complementizers and conditionals valuate subjects as NOM and may select TPs that do not have the EPP property. Following Soltan (2006), I take the EPP to mean that the

head must be a sister of another phrase (Chomsky 2004). In the next sections, we see how these properties of C and T explain word order and case behavior.

5.1.1. Accusative Subject Under Canonical *ʔinna*+SV Word Order

The derivation of the sentence in 253 is an example of a sentence with SV word order with null C. The verb *maat* 'die' moves to T under head movement, *Zayd* moves from spec,vP to spec,TP to satisfy the EPP property on T. In 253b, null C merges to the structure, and the C-T probe values the Case goal on the DP as nominative.

(253) a. $[_{TP}$ Zayd$_z$ $_{Case}$ $[_{T'}$ maat$_i$, ~~EPP~~ $[_{vP}$ … t_z t_i ……]]]
Zayd died

b. [CP $_{phi,\ Case(NOM)}$ $[_{TP}$ Zayd$_z$ $_{Case=NOM}$, $[_{T'}$ maat$_i$, ~~EPP~~ $[_{vP}$ … t_z t_i ……]]]]
Zayd died
'Zayd died.'

The sentence in 254 has the word order VS, different from 253 only in that T does not have EPP. When null C merges to the structure, in b, the C-T probe values the unvalued Case on the goal DP in spec,vP. The sentence spells out with VS word order.

(254) a. $[_{TP}$ $[_{T'}$ maat$_i$,$[_{vP}$ … Zayd$_{Case}$ t_i ……]]]
died Zayd

b. [CP $_{Phi,\ Case=NOM}$ $[_{TP}$ $[_{T'}$ maat$_i$ $[_{vP}$ … Zayd$_z$ $_{Case=NOM}$ t_i ……]]]]
died Zayd
'Zayd died.'

ʔinna only selects a TP which has EPP, resulting in grammaticality of 255 where a SV TP is selected, but not of 256 with VS word order.

(255) a. $[_{TP}$ Zayd$_z$ $_{Case}$ $[_{T'}$ maat$_i$, ~~EPP~~ $[_{vP}$ … t_z t_i ……]]]
Zayd died

b. [CP ʔinna$_{Case}$ [$_{TP}$ Zayd$_{z\ Case=ACC}$, [$_{T'}$ maat$_i$, ~~EPP~~ [$_{vP}$ … t_z t_i ……]]]]
Zayd died
'Zayd died.'

(256) a. [$_{TP}$ [$_{T'}$ maat$_i$,[$_{vP}$ … Zayd$_{Case}$ t_i ……]]]
died Zayd

b. *[CP ʔinna$_{Case}$ [$_{TP}$ [$_{T'}$ maat$_i$ [$_{vP}$ … Zayd$_{z\ Case=NOM}$ t_i ……]]]]
died Zayd
'Zayd died.'

But how does *ʔinna* select only TPs with EPP? Recall from SVAA data, only subjects that agree with the verb in number (as opposed to gender and person) can raise to spec,T, and Spell-Out preverbally. A straightforward explanation of SVAA, then, can be simply that EPP is a property of phi-complete T heads in Arabic. Arabic Lex, then, can select C heads with phi sets that may or may not include number, as FI takes place, EPP is transferred to T. C heads, then, differ in the type of phi set they contain. *ʔinna* comes with a complete phi set, while other complementizers may optionally carry a partial phi set that lacks number.

TPs that lack [number] and EPP in Arabic are not phi-deficient in the same way English infinitival TP lacking phi features are deficient. TPs that are [-number] still carry other phi features (person and gender) and can still be involved in valuating (nominative) Case for a subject (or accusative after *ʔinna*). If we accept Ryding's (2005) claim that verbal nouns function as infinitives in Arabic, their failure to license nominative subject can be explained by their lack of any person agreement morphology, making them the truly deficient infinitives. In 257, the verb after infinitival *ʔan* shows gender agreement and the subject (*lbanaatu,* 'the girls') is nominative.

(257) Zayd-un yuriidu ʔan tusaafira l-banaat-u
Zayd-NOM want3FS to travel3FS the-girls-NOM
'Zayd wants the girls to travel.'

The sentence in 258, which is the same but with an infinitive that lacks all phi features (the verbal noun *safar*), fails to license nominative for a subject. Indeed, if the agent is available in the structure, it is in the genitive as part of a construct state phrase. This data indicates that phi-deficiency in Arabic, which can be associated with inability to license nominative for subjects, is defined by absence of phi features rather than partial phi features.

(258) Zayd-un yuriidu safar-a l-banaat-i
Zayd-NOM want3MS travel-ACC the-girls-GEN
'Sally wants the girls travelling.'

Ryding does not account for some apparent conflicts between an infinitival analysis of verbal nouns, and their nominal characteristics (e.g. in (258), *safar* carries case endings). I will not attempt to explain how verbal nouns project as infinitives, as the main concern here is that a partial set of phi features in Arabic allows nominative case valuation. A possible approach towards this issue can be in the direction of Hazout (1992), who proposes that verbal gerunds in Modern Hebrew (which are comparable to Arabic verbal nouns with similar case properties) originate in V and move to IP via head movement.

All in all, case and word order facts in the *ʔinna* clause can be accounted for by requiring *ʔinna* to select a complement where TP carries EPP. Following Soltan (2006), I take EPP as a requirement to be a sister of something (Chomsky 2004). In the next section, I show that the Case and subcategorization properties of null C and *ʔinna* can also account

for VS word order in the *ʔinna* clause.

5.1.2. Case with Adjuncts + VS Word Order

In the previous section, we have seen how Case is valued by *ʔinna*, and how the ban on verbs directly following *ʔinna* can be accounted for via associating EPP with phi-complete TPs. I now move to explaining the grammaticality of sentences like 259 and 260, repeated from section 2.3.3. In both sentences, word order of the complement to *ʔinna* is VS. The verb is obligatorily separated from *ʔinna* by an adverb adjunct (*l-yawwm*, today, in 259), or a PP adjunct (*fii l-yabaan*, in Japan, in 260).

(259) qaala ʔinna *(l-yawwm.a) tattaDiHu Haqiiqat-u l-ʕayyinaat-i
said3MS that today-ACC become-clear3FS truth-NOM the-samples-GEN
'He said that today the truth about the samples comes out'

(260) sami?tu ʔanna *(fii l-yabaan-i) yaʔkulu r-rijaal-u ʔasamak-an
heard1S that in Japan-DAT eat the-men-NOM fish-ACC

saamat-an
poisonous-ACC
'I heard that in Japan men eat poisonous fish.'

In this section, I explain (a) the availability of VS word order and (b) the nominative case marking on the postverbal subject. I show that the phi properties of *ʔinna* explain the apparent easing of word order restrictions. The nominative marking on the postverbal subject is explained through locality at the PF interface.

First, we have seen that *ʔinna* carrying a full phi set, resulting in EPP on T, accounts for the requirement for the ban on VS word order directly after *ʔinna*. The word orders in 259 and 260 follow naturally from our definition of EPP as a requirement for the projection of the T head to be an instance of (a sister of) another phrase. Both

specifiers and adjuncts can satisfy EPP on T.

Postverbal subjects in 259 and 260 show nominative morphology, unlike preverbal subjects, which show accusative. I propose that the nominative morphology is the result of locality effect at Spell-Out in a similar manner suggested for agreement morphology by Ackema and Neeleman (2003), who build on a theory of syntax-phonology alignment proposed by Selkirk (Selkirk 1986; 1984). Selkirk (1986) uses data from vowel length as indicators of stress in Chi Mwi:ni to argue for a phonological phrasing theory where phonological domains can be derived from syntactic domains. For Selkirk, while phonological domains (phonological phrases) do not correspond to syntactic phrases, they are aligned with them. She shows that the right edge of PhPs (Phonological Phrases) are mapped to the edges of maximal projections in Chi Mwi:ni and French.[43] Take, for example, how the simple French sentence in 261 generates the prosodic structure of the phonological phrase:

(261) a. $_S$[[Ces [[très]$_{Det}$ [aimables]$_A$]$_{AP}$][enfants]$_N$]$_{NP}$[[en][ont]]$_{Aux}$[avalé]$_V$]$_{VP}$]]]
'These very nice children some-have-drunk'
b. ……]$_{Xhead}$ ……]$_{Xhead}$
c. (_____)(_____)
(Selkirk (1986:45), her 33, 36)

Selkirk examines the syntax-phonology mapping of phonological phrase in French through liaison, failure to delete word-final consonants when they are followed by a vowel within the same phonological phrase. In 261a, underlined consonants are those which show liaison. The deletion of final 's' in *enfants* indicates a phonological phrase boundary. The second line (b) shows the syntactic edges relevant to

[43] but which edge to be aligned to PhP boundary is parametric

phonological phrasing. Selkirk uses the term 'Xhead' to differentiate edges of phrases that involve heads and complements (which are relevant to phonological phrasing) from edges of specifier phrases, which do not fall in the same phonological phrase as heads (capturing Hayes' (1984) generalization that heads and adjacent complements together form a phonological phrase (Selkirk 1986:397)).

Selkirk limits her examination of the implications of her theory to phonology. Ackema and Neeleman (2003) examine how this theory carries over to the Minimalist tradition. In Minimalist terms, there is no more S-Structure, only interface levels. Ackema and Neeleman argue that the edge alignment theory of Selkirk works at Spell-Out, and before morphemes are shipped out to the phonological component. They argue that the generalizations in the edge alignment theory apply not only to phonological procedures, but also to allomorph realization. Using data from Arabic, Dutch, Celtic and Old French, they argue that the Spell Out of certain features that seems conditioned by adjacency is not syntactically conditioned, but rather a property of Spell-Out to PF. They explain SVAA and pro-drop in MSA as a satisfaction of a Spell-Out parameter that partial agreement obtains in PF if the terminal nodes carrying agreement morphology occur in the same phonological phrase at Spell-Out. If the two agreeing constituents spell out in different phonological phrases, full agreement obtains. Preverbal subjects are in a different phonological phrases from the verb, which explains the full agreement on the verb. Postverbal subjects are in the same phonological phrase as the verb, and the verb shows only partial agreement. The authors assume that the suppression of morphosyntactic features is subject to a notion

of recoverability, where the target of feature suppression (the verb in their Arabic data) and the terminal relevant to the context of feature suppression must agree. Similarly, they account for the pro-drop parameter as a suppression of preverbal phonological features of the subject pronoun as it lies in a different phonological phrase from the verb.

To see Ackema and Neeleman's account in action, take the example in 262, which compares VS and SV word orders at the point of Spell-Out. In VS word order in 262, the subject stays in-situ. The linearization algorithm divides the structure into two phonological phrases, where the verb and the subject belong to the same phonological phrase, and the object in another phrase (square brackets are used to indicate syntactic units and curly brackets phonological units). In SV word orders, the subject raises to a higher position than the verb, and linearization leads to the preverbal subject occurring in a separate phonological phrase from the verb and the object.

(262) a. $[_{FP}\ [_{F}\ V]\ [_{IP}$ subject $t_V\ [_{VP}\ t_V$ object$]]]$
b. {V subject} {object}
c. $[_{FP}$ subject $[_{F}\ V]\ [_{IP}\ t_{subject}\ t_V\ [_{VP}\ t_V$ object$]]]$
d. {subject} {V object}

(Ackema and Neeleman 2003, their (40))

Ackema and Neeleman do not explicitly specify why the object gets its own PhP with postverbal subjects. I speculate that they imply that the right alignment mapping creates a small PhP that involves the VP edge, and a larger PhP that involves the IP edge containing the subject. When the subject moves to spec,FP, it is in a separate PhP, and the material between IP and VP (traces of the verb and the subject) is invisible, rendering only one PhP that involves the verb and the object. In all cases, the phrasing

of the object is trivial to their discussion (and ours), as they are concerned with subject-verb agreement.

Ackema and Neeleman's rule of feature reduction, modelled after Bonet (1991, 1995), states that if a morphological feature is present in two constituents that linearize in the same phonological phrase, the first instance is deleted and the second instance is retained. In VS word order, the linearization of number the (plural) morpheme proceeds as in 263, resulting in the plural marker appearing only on the subject.

(263) Arabic Agreement Weakening
{[V Plr . . .] [D Plr . . .]}→{[V . . .] [D Plr . . .]}
(Ackema & Neeleman 2003, their (41))

In 262, on the other hand, the subject and the verb are in separate phonological phrase, blocking Agreement Weakening, and allowing the plural morpheme to appear on both the verb and the subject.

Given the close link between phi features and Case, it is not unusual to expect some parallelism between the behavior of the spelled out case morphemes and the behavior of phi agreement. First, recall that the accusative and nominative markers on preverbal and postverbal subjects, respectively, are allomorphs of the same CASE feature. Morphological case marking appears in both SV and VS word orders, which means that if we are to adopt Ackema and Neeleman's account, feature reduction will not take the shape of deletion of a case allomorph, but rather a selection of a given allomorph. It is also safe to assume that the nominative morpheme is the unmarked allomorph for CASE of subjects and accusative is the marked morpheme in this context, selected based on the verbal nature of the *ʔinna* family. Feature suppression can

provide an explanation why the different allomorphs are so distributed. When the subject is preverbal, as in 264, it is in a different phonological phrase from T. The preverbal subject receives a value for its Case feature as the marked/accusative morpheme.

(264) a. [$_{CP}$ *ʔinna* [$_{TP}$ subject$_{marked(accusative)}$ [$_{T}$ V $_{marked(accusative)}$] [$_{vP}$ t$_{subject}$ t$_{V}$ [$_{VP}$ t$_{V}$ object]]]
b. {*ʔinna* subject} {V object}

When sent to the interface, the preverbal subject and T (now the Case probe after FI) are not in the same phonological phrase, so the marked case morpheme (accusative) is selected as the phonological output 265, and the PF uninterpretable CASE on T is deleted.

(265) {*ʔinna* D $_{CASE(marked)}$. . .] [V$_{CASE\ (marked)}$ object. .]}→ {[*ʔinna* D $_{ACC}$] [V~~$_{CASE\ (marked)}$~~ object]}

Postverbal subjects, on the other hand, are spelled out in the same phonological phrase as T (266).

(266) a. [$_{CP}$ ʔinna AP/PP [$_{TP}$ V] [$_{vP}$ subject t$_{V}$ [$_{VP}$ t$_{V}$ object]]]
b. {*ʔinna* AP/PP} {V subject object}

This configuration allows Ackema and Neeleman's suppressed agreement in the case of phi features. In similar lines, it can be taken as a possible context for Case agreement weakening. However, unlike phi features, where the agreement morpheme is deleted, Case weakening takes the shape of selecting the unmarked (nominative) allomorph (267).

(267) {*ʔinna* AP/PP. . . } {[V$_{CASE\ (marked)}$ subject $_{CASE(marked)}$ object. .]}
{[*ʔinna* AP/PP} {subject $_{NOM}$ V~~$_{CASE\ (marked)}$~~ object]}

To sum up, this section accounts for two of the three apparent exceptions to the

otherwise strict case and word order restrictions posed by *ʔinna*-type complementizers. Allowing postverbal subjects is contingent on satisfying the requirement of EPP on T. If EPP is satisfied with a phrase other than the subject (e.g. by a PP or AP adjunct)[44] the derivation converges. Nominative morphology on postverbal subjects can be explained as a Spell-Out operation on morphology where the marked case allomorph is selected in strong agreement phonological configurations, and the unmarked case allomorph is selected in weak agreement phonological configurations. The remaining exception to word order and case behavior is when *ʔinna* is followed by an expletive pronoun, which is the topic of the next section.

5.1.3. Expletive Pronouns After *ʔinna*

If *ʔinna* is followed by an expletive pronoun, VS word order is allowed, as we have seen in 131, repeated here as 268. These sentences are similar to the data discussed in the last section: VS word order is allowed in the *ʔinna* clause if *ʔinna* is separated from the verb by another constituent (an expletive pronoun in this case). The EPP subcategorization requirement is satisfied by the expletive pronoun, and the nominative postverbal subject is in a different phonological phrase from *ʔinna*.

(268) a. ʔdaaf-at ʔanna-hu Nadia saafar-at
added-3FS that-expl Nadia traveled-3FS
'She added that Nadia travelled.'

b. ʔdaaf-at ʔanna-hu saafar-at Nadia
added-3FS that-expl travelled-3FS Nadia
'She added that Nadia travelled.'

[44] But not by V-T head movement, following Chomsky (2001:37 – 38).

c. ʔdaaf-at ʔanna.hu Nadia ɣaneyyat-un
added-3FS that.expl Nadia rich-NOM
'She added that the Nadia is rich.'

d. ʔdaaf.at ʔanna.hu Nadia fii l-hind.i
added.fs that.expl Nadia in the.India-DAT
'She added that Nadia is in India.'

e. ʔdaaf.at ʔanna.hu fii bayt.i.na rajul-un
added.3FS that.expl in house-DAT.our man-NOM
'She added that a man is in our house.'

Nonetheless, I show in this section that sentences involving expletive pronouns fall under a different analysis. First, I show that analyzing sentences involving expletive pronouns along the same lines as AP/PP *ʔinna* sentences raises problems. I then show, based on data from CA and Egyptian Arabic, that expletive pronouns in Arabic carry structural Case. Finally, I show evidence that in the type of sentences under discussion, the expletive is the subject of a null copula of the type described in section 2.1.1.1 with a CP complement. The subordinate clauses in (268) contain one Case licenser (*ʔinna*), and two DPs showing case morphology; the expletive pronoun *–hu*, and *Nadia*.

The expletive pronoun in 268 cannot be analyzed in the same way as the adjuncts discussed in the previous section. The adjuncts in 259 and 260 have semantic value (location, time), and they incidentally satisfy the formal EPP requirement of *ʔinna*. Expletives, on the other hand, lack semantic content, which means that they may only be there to satisfy a formal requirement. This formal requirement cannot be EPP (which is incidentally satisfied by adjuncts in 259 and 260. If the expletive pronoun were present only to satisfy EPP, it would not appear in sentences where EPP is already satisfied such as the well-formed 268a, contrary to fact. In 268a, the EPP requirement

on the complement of *ʔinna* is already satisfied by the preverbal subject *Nadia*, but the expletive pronoun is still allowed.

So far we have seen two formal requirements that need to be satisfied in *ʔinna* clauses: EPP and Case. we have seen in the previous paragraph that the expletive pronoun is not needed for EPP satisfaction, which leaves us with Case. Comparing 268e and its counterpart in 269 supports the proposal that expletives are there to fulfill Case requirements. The sentence in 269 is identical to 268e except for two differences: the absence of the expletive pronoun, and the case of the subject. In 269, *ʔinna* values the Case of *rajul* 'man' as accusative. There is one Case valuator (C-T) and one subject showing accusative. The fact that 269 is well-formed indicates that the EPP requirement for *ʔinna* is satisfied. In 268e, the expletive shows accusative morphology, which means that the expletive satisfies the Case requirement of *ʔinna*, rather than EPP requirement of the lower phrase. But if the expletive absorbs the accusative from *ʔinna*, what licenses the (nominative) Case of all the subjects in 268?

(269) ʔdaaf-at ʔanna fii bayt-i-na rajul-an
added-3FS that in house-DAT-our man-ACC
'She added that a man is in our house.'

Expletive pronouns in MSA are restricted only to post-*ʔinna* position, so further evidence that may shed light on the question posed at the end of last paragraph is hard to find. But other varieties of Arabic can help show that the sentence in 269 has an additional covert Case licenser.

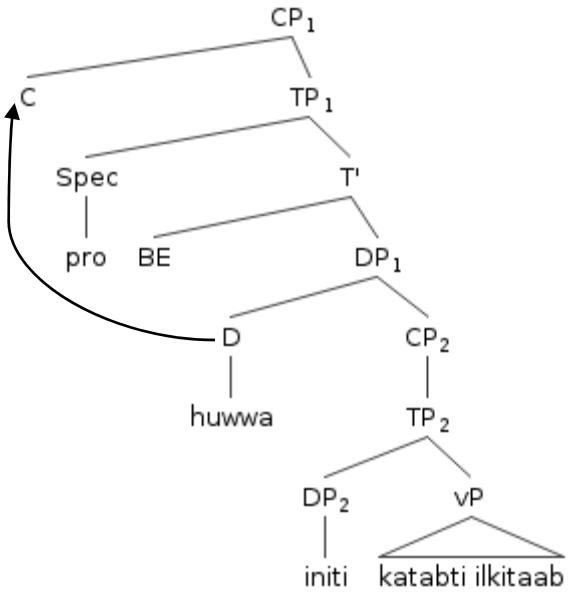
Eid (1992) uses data from question formation in Egyptian Arabic to argue that pronouns may have CP, rather than NP, complements. In Egyptian Arabic, yes-no

questions can be formed by intonation alone, and they can also be introduced by a pronoun, as can be seen in 270. Eid uses the behavior of those 'question pronouns' to argue that pronouns can take a CP complement.

(270)	(huwwa)	inti	katab-ti	il-gawaab
	3MS	you(FS)	wrote-2FS	the-letter
	'Did you(fs) write the letter?'			
			(EA, adapted from (Eid 1992), her (15c))	

To use the more recent terms of this dissertation, Eid proposes the structure in 271 for the sentence in 270.

(271)



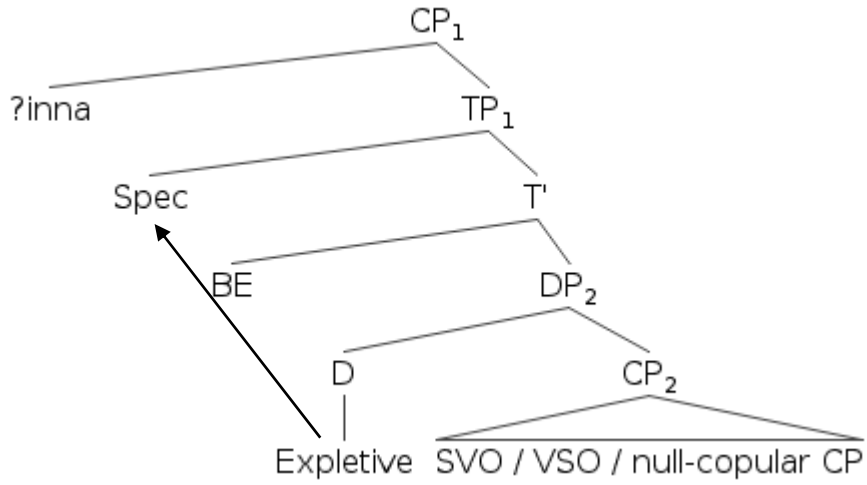
She argues that question pronouns are D heads that take CP (rather than NP) complements. The DPs headed by the question pronouns (DP_1 in our example) are themselves a complement of a matrix +Q CP (yes-no question). That matrix CP is a null-copula sentence which has *pro* subjects. The question pronoun raises to matrix C as a result of the Q feature (head movement). Eid uses agreement and subordination data to

argue for a sentential structure similar to 271,[45] where 'BE' is the null copula. Eid's account is based on pre-Minimalist assumptions, and is mostly concerned with Egyptian Arabic, not MSA. The most important point in her argument, though, is that a non-referential pronoun can be taken as evidence of an additional covert functional complex centering around a null copula.

Extending Eid's account to MSA *ʔinna*+expletive constructions can account for case and word order in the manner shown in 272. The expletive pronoun is the head has a CP complement (CP_2) projecting DP_2. This DP_2 is itself a complement to a null copula[46] that ends up in matrix T, receives its phi complex, Case, and EPP through FI from *ʔinna*. EPP is satisfied by moving DP_2, headed by the expletive to spec,T where the expletive values its Case as ACC. Under the structure in 272, the apparent Case conflict in 268 disappears: there are two DPs showing Case (the expletive pronoun and the subject), and two Case licensers (two complementizers heading two CPs: matrix *ʔinna* and the null complementizer heading the CP complement of the expletive). The accusative case marking on the expletive is explained by its position in spec,TP position. The nominative subject and availability of all possible word orders are because the lower CP is not introduced by *ʔinna*.

[45] The structure in (260) is updated to reflect DP, TP and vP – which Eid does not assume.
[46] In terms of interpretation, that structure gets a reading close to 'it is the case that X,' where X is the proposition expressed in the CP complement of the expletive pronoun.

(272)



5.1.4. Summary

So far in this chapter we have seen that case and word order variation across different complementizers can be explained by positing that the locus of Case licensing and valuation is C rather than T. Conditionals and null complementizers value nominative case preverbally and postverbally. *ʔinna*-type complementizers value accusative to subjects due to their verbal nature. Postverbal subjects show nominative due to phonological effects on Spell-Out, where Case agreement is suppressed when the subject DP is in the same phonological phrase as T.

Word order restrictions after *ʔinna* can be explained by the fact that, unlike conditionals or null complementizers, *ʔinna*-type verbs transfer a full set of phi features to T, which results in the EPP property of T. The EPP requirement on T can be satisfied by subjects in spec,TP, resulting in the well-formedness of SV word order after *ʔinna*. EPP can also be satisfied by a PP or AP adjunct, allowing VS word orders if a PP or AP adjunct directly follows *ʔinna*. When *ʔinna* is followed by an expletive, this expletive

absorbs the Case of *ʔinna*, and introduces an additional CP layer. That additional CP is a separate phase of its own right, and has its separate feature structure.

5.2. Problems Avoided

In this section, I show that analyzing *ʔinna* and its sisters as verbal complementizers capable of assigning accusative Case will help avoid problems of previous analyses indicated in the review of literature. Section 5.2.1 evaluates the proposed analysis as opposed to analyses that assume DCA. Section 5.2.2 evaluates the proposed analysis vs. MCA.

5.2.1. Default Case Avoided

In this section, I investigate the position of the proposed Case valuation algorithm against literature that explains accusative DPs after *ʔinna* in terms of DCA (section 3.1). Recall that accusatives after *ʔinna* are used as evidence for DCA by Mohammad (1988, 2000), Ouhalla (1994), and Soltan (2006). Abandoning DCA for verbal-C analysis has little effect on the arguments made in this literature.

As indicated in the review of Mohammad (1988), his characterization of nominative default case as 'a Case assigned to a +N category if this category is immediately dominated by a sentential category and it is not governed by a lexical Case assigning governor' suggests that what Mohammad takes to be 'default' is in fact structurally definable. Furthermore, his structural definition is now consistent with the proposed analysis. NOM is received from null C (probably what Mohammad means by 'sentential category'), but also does ACC. There is no need to posit two different

configurations for assigning Case in the same (subject) position. The underlying assumption under verbal *ʔinna* does not weaken the argument made by Mohammad (1988), that NOM is not assigned under government by AGR.[47] In fact, this current proposal is consistent with Mohammad's proposal. NOM originates in C, not in T.

The second reference to *ʔinna* in the context of DCA is that of Ouhalla (1994). The proposed analysis of *ʔinna* avoids the drawbacks of Ouhalla's analysis. Ouhalla's analysis assumes two different ways for Case checking; DCA for nominative and spec-head relation for accusative, which Coopmans (1994) notes as a weakness in the analysis. Under verbal *ʔinna* analysis, and its implication that the C is consistently responsible for Case valuation at the same position, this lack of uniformity is avoided. The current proposal for SVAA (that phi-complete T has EPP) is in essence compatible with Coopmans' alternative to Ouhalla's analysis. It is the feature-based alternative to his projection-based proposal that there are PreP and NumP (person and number projections).

The third reference to *ʔinna* in the context of DCA is that of Soltan (2006). Verbal *ʔinna* avoids problems raised in Soltan's (2006) analysis of SVAA (section 3.1.4.1): base-generation of preverbal subjects in nontheta position; expletive *pro* (null expletive) in postverbal position; and DCA. Verbal *ʔinna* assumes that Case is valued via C-T, hence avoids the need to posit base-generation to account for nominative Case in preverbal subjects, or its alternation with accusative after *ʔinna*. Although this dissertation is not meant to explain SVAA, the association I assume between phi features and the

[47] If we translate AgrP to be the GB equivalent to TP in the current analysis, that is.

availability of EPP for preverbal subjects avoids Soltan's base-generation analysis. No argument DP needs to merge in nontheta position, no expletive *pro* needs to be posited, even temporarily in the course of the derivation, and nominative case morphology is reflected more uniformly in preverbal and postverbal subjects, as explained in the next paragraph.

Soltan uses two types of data as evidence that the sentence-initial DP in SV word order is not a 'real' subject, but a left-dislocated element. He shows that wh-elements can move across postverbal, but not preverbal subjects. He also shows that verbs show full agreement with pronominal subjects in both preverbal and postverbal positions, which can be taken as an argument against EPP on phi-complete T. I leave these for future research to further investigate alternative explanations to that of Soltan. A possible direction for the wh-movement restriction can be accounted for by positing that C heads with [Q] features, opposite to *ʔinna*-type complementizers, cannot select TP complements that have EPP. This proposal will give the full range of possibilities as far as phi features on C are available: null C and conditionals can optionally require EPP, *ʔinna* always requires +EPP complements and [Q] obligatorily requires –EPP complements.

As for full agreement with pronouns (the verb shows full agreement with the subject in VS and SV word orders, c.f. 170), postverbal pronominals may not be actual subjects, after all. For one thing, Soltan notes postverbal subject pronouns are the marked word order, and carry contrastive focus or emphasis. Indeed, postverbal pronouns are the highest marked of the three possible word orders. All three sentences

in 273 are well-formed, but the sentence in c with postverbal subject is grammatical only if the pronoun carries the pitch accent.

(273) a. qaraʔ-na d-dars-a
read-3FP the-lesson-ACC

b. hunna qaraʔ-na d-dars-a
they-F read-3MP the-lesson-ACC

c. qaraʔ-na hunna d-dars-a
read-3MP they-F the-lesson-ACC

The highest marked sentence, 273c, bears focus stress on the pronoun, with emphatic meaning close to that in the English sentence in 274. In spite of the difference of structure, the pragmatic effect of 273c and 274 is the same.

(274) The president himself ordered the strike.

Future research could investigate whether agreement on the verb in VS word order with postverbal pronouns is still with *pro*, as suggested by Soltan, or whether the overt pronoun is a PF repetition of *pro* for emphasis. Arabic allows emphasis of phrases of various types through repetition/reduplication. In 275 the subject *axuuka* 'your brother' is repeated as a discourse technique used by the speaker for emphasis and to eliminate any doubt the listener may have.

(275) axuuka axuuka yarʕaa-ka
your brother your brother look after-you
'Your brother looks after you.'

Emphatic repetition can take place with nonnominative DPs. In 276, the emphasized element is the accusative DP *rraʔiisa* 'president'. In fact, any word or phrase can be emphasized using that technique. I speculate that it is a PF copying operation as it can operate on any constituent.

(276) qaabaltu rraʔiis-a rraʔiis-a
met1S the president-ACC the president-ACC
'I met the president.'

Emphatic repetition is also used with pronouns, as can be seen in 277. The subject pronoun *ʔana* (I) is repeated for emphasis.

(277) ʔana ʔana ishtariitu-ha
I I bought-it
'I bought it.'

Emphatic repetition of the pronoun *–ha* (her) as *hiyya*.

(278) qaabaltu-ha hiyya
met-I-her she
'I met her.'

Likewise, the genitive clitic *–i* (my) in 279 is repeated as *ʔana* for emphasis.

(279) qaabal-tu-ha fii maktab-i ʔana
met-I-her in office-my I
'I met her in my office.'

Note that all repeated pronouns are in the nominative case, regardless of the case of the original pronoun. A possible explanation is that accusative pronouns are clitics. Only the nominative variant is a free morpheme, where it can receive sentential stress. Because Emphatic Repetition is a PF operation, Case valuation (licensing) is not at play.

Returning to full agreement on the verb with postverbal pronouns. It is possible that in Soltan's data, the postverbal pronoun is an instantiation of Emphatic Repetition. The verb shows full agreement with *pro*, then the overt nominative pronoun is emphatic repetition of *pro*. If this is the case, then SVAA of postverbal pronouns can be accounted for as a case of *pro-drop* rather than an exception to the phi-EPP correlation. All in all, I mark this tentative account as a possible direction for further research to resolve the

conflict between Soltan's analysis and the proposed verbal *ʔinna* analysis.

5.2.2. Multiple Case Avoided

The proposed analysis of verbal complementizers in Arabic eliminates the need to posit MCA, and avoids the problems discussed in section 3.2. The proposed analysis assumes that *ʔinna*-type complementizers contribute to the accusative Case of the subjects, while null complementizers and conditionals contribute to the nominative. Under this analysis, Case is valued only once through complementizers. The accusative morphology of the *ʔinna* subject is the only Case/case that this subject is probed for. By taking the Case probe away from T to C, nominative/accusative alternation is determined at the point of derivation where the complementizer merges to the structure. There is no NOM that can be argued to have been overwritten by ACC at a later stage in the derivation.

6. CONCLUSION

This chapter shows the larger context for the proposed account for *ʔinna* clauses. The discussion of Case and word order behavior in *ʔinna* Clauses bears on aspects of Case Theory and the nature of Phi features and Spell-Out. Section 6.1 provides a summary of the account proposed in this dissertation. Section 6.2 discusses the theoretical implications of the proposed account. Specifically, it discusses the relationship between C and T as far as Case is concerned. Case can be determined by C under direct selection, where the Case probe functions directly from C, or it can be Transferred to T under FI, where it values Case from there. Section 6.3 indicates areas for future research.

6.1. Summary

This dissertation set out to explain word order restrictions and case/Case asymmetry of subjects following *ʔinna*-type complementizers. Accusative case marking on preverbal subjects after *ʔinna* is explained by the verbal nature of the complementizers. Nominative case marking on postverbal subjects is explained in terms of locality of Spell-Out domains whereby a verbal complementizer at a different phonological phrase fails to affect the morphological markup of a DP it has licensed for Case in the syntax. *ʔinna* subcategorizes for TPs with the EPP property, and this is why VS word order is only allowed if EPP is otherwise satisfied by adjuncts.

6.2. Theoretical Implications

This account of *ʔinna* effect bears on a number of aspects of the theory of syntax. It reduces empirical evidence supporting MCA and DCA. MCA poses serious challenges to a theory of derivation, as it potentially removes the requirement to value all unvalued features prior to Spell-Out. Just like Schütze's (2001a) arguments regarding Korean case stacking weaken MCA by eliminating some of its empirical support (showing that Korean case stacking is, in fact, case + focus), this dissertation further reduces contexts where MCA holds by showing that subjects are only licensed once, and their case/Case has never been overwritten in syntax or in morphology.

Similarly, this dissertation weakens support for DCA by providing a more elegant account for data previously used to support DCA. DCA is already problematic to a theory of grammar, because it potentially allows all DPs in a derivation to Spell-Out with default case marking. By showing a stronger correspondence between Case licensing and case morphology, the proposed mechanism for subject case/Case valuation contributes to a tighter connection at the syntax-morphology interface. Another issue related to DCA and Spell-Out at the interface is case morphology in postverbal subjects with *ʔinna*, where I explain case variation in terms of 'markedness,' Case agreement, and phonological phrases. I discuss whether this account is DCA in disguise in the coming subsection.

6.2.1. Anticase and Antiagreement

In section 5.1.2, I use Ackema and Neeleman's (2003) account for SVAA in Arabic to explain case asymmetry postverbally with *ʔinna*. They explain partial agreement on

postverbal subjects as a Spell-Out condition. At Spell-Out, the verb and the postverbal subject are at the same phonological phrase, the number agreement morpheme is recoverable from the local DP, eliminating the need for full agreement morphology. Because the preverbal subject spells out at a different phonological phrase from that of the verb, full agreement is needed, as [number] is not recoverable in the local phonological phrase. I drew on the general assumption that Case is a reflect of phi features to suggest that similar locality restriction can affect how the Case valued by the different complementizers is translated to morphemes. I have proposed that Case valuation takes place in syntax, while the morphological realization of Case is conditioned by similar locality conditions to those of agreement. Postverbal subjects are in the same phonological phrase as the Case licenser, allowing for weaker Case agreement (i.e. for nominative morphology), while preverbal subjects are in a different phonological phrase resulting in strong Case agreement, realized as accusative morphology due to the verbal nature of *ʔinna*.

Although the proposed account seems to hint at nominative morphology for Case valued by complementizers as 'default' or 'unmarked' case, it does in no way provide any support to DCA. Under DCA, morphological case is sometimes a repair mechanism for an unlicensed DP (nominative subjects in the case of Mohammad (1986, 1988, 2000) and Ouhalla (1994)), or the result of a derivation constructing a Syntactic Object that includes a DP without its Case licenser, as in the case of ellipsis in (Schütze 2001b) discussed in section 3.1.6.1. The proposed account of case asymmetry as partial case agreement is different in that the subject is always licensed for Case by the same

licenser, a C head, and is marked for Case Agreement with C-T in syntax. The morphological value of the case agreement is systematically determined at Spell-Out. In that sense, anticase does not support Mohammad's or Ouhalla's view of nominatives as default case but rather weakens it by showing that nominative subjects can be systematically accounted for through syntactic relations.

The proposed account of case behavior under *ʔinna* has a weaker relationship to DCA of Schütze (2001b). For Schütze, default case is used to spell out DPs not associated with any case feature determined by syntactic mechanisms. My analysis shows that subject case variation in Arabic is determined by syntax and syntax-morphology interface requirements. Hence, it neither supports nor weakens Schütze's approach to DCA.

6.3. Areas for Further Research

The account for *ʔinna* case marking and word order effects reveals the close relation between Case and C. The account provided here mainly assumes FI, but it is mostly compatible with a selection (Agree) account (Chomsky, 2001). Under selection, T heads are selected from Lex with uninterpretable phi features, and optionally EPP. Upon merger of T, the unvalued phi features are valued, and the EPP property is satisfied. C comes from Lex with uCase and uPhi, and values the unvalued Case on the subject. Each C head selects the proper kind of TP via Agree (with or without satisfied EPP). Under FI, C provides Case and phi features, which are transferred to T, where they act as probes on T. Subjects receive their Case from T rather than C, only immediately after C merges and FI takes place.

Preference for one approach over the other does not come from their ability to account for Arabic data concerning *ʔinna*, but rather from the two approaches in general. The first approach, Case and EPP under selection, faces problems about the nature of EPP and availability of uninterpretable features after valuation. *ʔinna* selects TPs with EPP, but EPP is not a feature: it does not probe a domain on its own and value an unvalued feature on a goal. It is uninterpretable on both the T probe and the DP goal it displaces. It is hence not a feature, but rather a property or a requirement of the head in question. This makes it harder for a feature-based system to implement: how can a higher selecting head to subcategorize for a TP with (satisfied) EPP? Another issue with the selection algorithm is the lifespan of uninterpretable/unvalued features. If uninterpretable features are deleted as soon as they are valued (or else they will be undistinguishable from interpretable features), considering EPP as a property of uPhi on T will cause it to be deleted alongside the host features before C merges to the structure. Generally, the timing of deletion uninterpretable features and the relation between uninterpretable and unvalued features are a part of the reason for proposing FI (c.f. Richards (2007)).

FI allows uninterpretable features to stay alive long enough for the subject to be available for Case valuation by C, for subjects stay in spec,*v*P until complementizers merge to the structure. Arguments against FI for Arabic complementizers as proposed in this dissertation are those concerned with FI in general. For example, den Dikken (2014) argues that assumptions regarding interpretable-uninterpretable and valued-unvalued features are either not empirically universal or irrelevant in that they do not lead to

crash at C-I, in effect reducing the motivation for FI to EPP. He then claims that defining EPP in terms of probe-goal driving force of movement is not the only way of interpreting EPP. It can also be understood as a spec-head requirement on the edge of nonphase heads (López 2007). If this is the case, den Dikken continues to argue that this alternative analysis of EPP can be further supported by showing that instances of movement to the specifiers of phase heads can be analyzed as movement to a specifier position in the complement of the phase head.

Den Dikken's and López's approach for EPP as a requirement to fulfill specifier positions of TPs is a better fit for the proposed analysis in this dissertation. Allowing EPP to be satisfied by PP and AP adjuncts after *ʔinna* accounts for postverbal subjects in *ʔinna* clauses. My analysis, similar to Soltan's (2006), assumes – and supports – López' and den Dikken's arguments, but does not argue against FI per se. I leave it to future research to identify to what extent the behavior of Arabic complementizers supports FI or EPP-by-selection.

Finally, I leave to future research further investigation of Ackema and Neeleman's (2003) theory of antiagreement as a PF interface procedure, and its implications for the anticase account proposed in this thesis. To the best of my knowledge, an extension of Ackema and Neeleman's account to Case has not been proposed before. It nonetheless accounts elegantly for case assymetry in *ʔinna* clauses. Developing the same locality constraints for (phi) agreement and Case along the lines proposed here is a welcome refinement of the theory, and offers added support to the

view that Case is a reflect of phi features. As the data from Arabic complementizers shows, this enterprise seems promising and worthy of deeper investigation.

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